MULTICULTURAL HEALTH

Mortality Patterns by Race and Ethnicity, Oregon, 1986-1994

Center for Health Statistics
Center for Disease Prevention and Epidemiology
Oregon Health Division
Oregon Department of Human Resources

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INTRODUCTION

Of all forms of inequality,
injustice in health is the most shocking and inhuman.
- Martin Luther King, Jr.

Not all Oregonians enjoy long and healthy lives, but the continuum from good health to poor health is often difficult to define. Death, in contrast, is a clearly defined event and has long been the single most reliable indicator of the health of a population. It is the manifestation of the unique interplay of social, cultural, biological, and economic factors among individuals and groups of individuals.

For the first time in a decade, new mortality statistics by race and ethnicity are available.

Creating a report such as this is difficult for a variety of reasons. Data sources may not be compatible or may not exist and methodological considerations limit the ways we can identify culturally diverse populations. Nonetheless, every decade, with the availability of new census information, the Center for Health Statistics analyzes the mortality experience of Oregon's racial and ethnic minority populations. Our goal is to describe the mortality profile for all groups, but because the populations for some groups are small and the deaths few, this is not possible. African Americans, American Indians, and Hispanics had sufficiently large populations to allow the calculation of meaningful statistics. A full range of statistics for the period 1986-1994 are available for the first two groups, but those for Hispanics are limited due to methodological considerations (see pages 5 and 43). Methodological considerations also led to combining the Chinese and Japanese into one group for the purpose of this report (see page 8).

Other difficulties are related to naming conventions. In this report, the terms *White*, *African American*, *American Indian*, *Chinese and Japanese*, and *Hispanic* were used. (The term American Indian includes Alaska Native, Aleut, and Inuit.) These terms were chosen from several alternative choices. We recognize that within each group different individuals may have different preferences, but decided to use a single consistent term to describe each group to avoid nomenclatural confusion.

The apparent mortality experience of Oregon's racial/ethnic populations can be misleading. In all cases, the total crude death rates are lower than for the majority White

population. But there is a paradox. While at first glance Whites appear to have the least favorable mortality profile, this is a reflection of the different age distributions of the racial groups. After controlling for the age distribution differences by calculating age-adjusted death rates, it is clear that African Americans have the least favorable mortality profile and the Chinese and Japanese the most favorable. (Age-adjusted death rates allow the comparison of different groups *as if* the age composition of each group was identical to that for all other groups.)

The goal of this report is to draw attention to the unmet needs of Oregon's growing racial/ethnic minority populations and to act as a springboard for improvements in public health education and policies. This report provides summary and detailed data arrayed in an easy to access format and should be useful for program and resource development.

The following are some highlights from the report:

- The age-adjusted death rate was 36 percent higher for African Americans (1,209.3 per 100,000 population) compared to Whites (887.8). Not only was the risk of death higher in any given age group, African Americans were more likely to die prematurely.
- Age-specific death rate differences were sharpest between African Americans and Whites 35-54 years of age; the African American death rate was 2.4 times higher in this age group.
- African Americans were significantly more likely to die from nearly all chronic diseases as well as from unintentional injuries[a] and homicides.
- The greatest difference by cause of death between African Americans and Whites was in the homicide rate; it was over seven times higher for African Americans, 34.8 compared to 4.6. Homicide was the fifth leading cause of death for African Americans compared to seventeenth for Whites.
- Other causes showing strong racial differences included diabetes, where the age-adjusted death rate was 2.8 times higher for African Americans than for Whites, AIDS (2.5 times higher), and alcoholism (2.2 times higher).

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a. Because of the preventable nature of these injuries, they are no longer considered "accidents" by the public health community.

- Although the age-adjusted death rate was lower for American Indians (761.9) compared to Whites (887.8), they were significantly more likely to die prematurely.
- The largest difference by age between American Indians and Whites was among 25- to 34-year-olds; the American Indian death rate for all causes of death combined was 70 percent higher.
- The greatest disparity in age-adjusted death rates by cause between American Indians and Whites was for alcoholism; the American Indian rate was 3.4 times higher, 38.1 compared to 11.3. Alcoholism was the fourth leading cause of death for American Indians but twelfth for Whites.
- American Indians were 3.2 times more likely to die in a homicide and 1.5 times more likely to die from unintentional injuries than were Whites but significantly less likely to die from heart disease, cancer, or cerebrovascular disease.
- Because of data limitations, some measures of mortality could not be calculated for Hispanics; however, there is evidence suggesting an increased risk from alcoholism, unintentional injuries, homicide, and diabetes.
- Oregonians of Chinese and Japanese ancestry had the most favorable mortality profile; their age-adjusted death rate was 23 percent below the age-adjusted death rate of Whites, 680.4 compared to 887.8.
- All Chinese and Japanese age-specific death rates were the lowest in the state except for persons 75 or older; the rate for American Indians was the lowest among elderly residents.

This report focuses on the mortality patterns of African Americans and American Indians because of their elevated risks of premature mortality as well as the availability of data for these two groups. Mortality data is important because it is a fundamental quality of life indicator and unlike survey data (which is based on a sample of the population), data for the entire state population are available: reporting is virtually 100 percent.

Death represents the ultimate manifestation of the complex set of factors contributing to the health of a population, including income level, cultural practices, years and quality of education, lifestyle choices, medical risk factors, geographic distribution, genetic background, and access to quality health care. These determinants of health also show

associations with race/ethnicity: some are influenced by the discrimination experienced by Oregon's minority groups. Race/ethnicity is a surrogate measure for these health factors. While there are risk factor and outcome commonalities among the minority groups, there are also differences. Programs to address the risk factors need, in some cases, to be tailored to specific groups. This report describes the mortality experiences of Oregon's largest racial/ethnic minorities. Each is unique.

METHODOLOGY

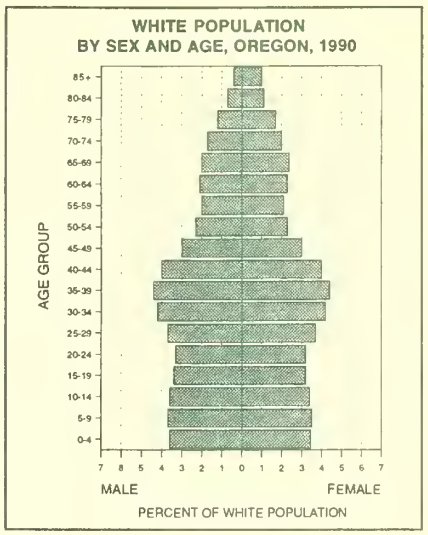
Data in this report were compiled from death certificates filed with the Oregon Health Division's Center for Health Statistics. Because the populations for minority groups are small and more youthful than the general Oregon population, an insufficient number of deaths occur in a single year to allow meaningful analysis. Therefore, data for a nine-year period (1986-1994) were aggregated to provide more reliable rates. The U.S. Census Bureau was the source of the population data.[1] Oregon decedents in this study were overwhelmingly White. The percentage distribution by race was: White, 97.1; African American, 1.3; American Indian, 0.6; Chinese and Japanese, 0.4; and Other, 0.5 (e.g., Hawaiian, Filipino, Korean, Pakistani). Because American Indians, and perhaps other non-White races, are sometimes classified as White on death certificates, the measures of mortality reported herein may understate the actual mortality experience of these Oregonians.[2,3]

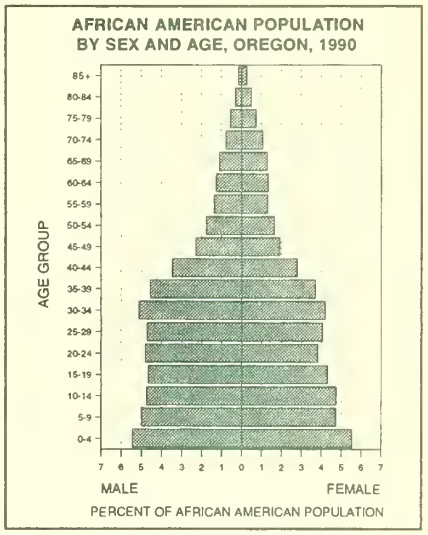
Since no specific question regarding Hispanic ethnicity was recorded on death certificates until 1989, mortality information for this group was limited. For this reason, and the population-related issues described on page 43, rates are not calculated, but actual counts, median age at death, and years of potential life lost are included for the leading causes of death. Nineteen in 20 (94.5 percent) of Hispanic decedents were White; the others were Indian (2.2 percent), of African descent (1.0 percent), or Other (2.2 percent). Most Hispanics were of Mexican ancestry (77%); the others were of Central or South American (4.0%), Puerto Rican (2.7%), Cuban (2.1%), or other/unknown (14.0%) ancestry.

Several statistics are used in this report to assess a group's mortality patterns. One measure, the ***age-specific death rate***, is the number of deaths in a certain age group divided by the population of that age group (times 100,000) while the ***crude death rate*** is the number of deaths per population regardless of age. (Rates based on a small number of events may be unreliable.)

However, the ***age-adjusted death rate*** is a more sophisticated index of mortality when comparing groups because, as the name implies, the rate derived is not biased by very young or very old populations. The age-adjusted death rate permits the comparison of populations with disparate age structures *as if* the populations had similar age

Age-adjusted death rate:
A rate that controls for the age structure of different populations.





Comparative mortality figure:

The ratio of the age-adjusted death rate for a minority group to the rate for Whites.

distributions. The rate is computed by stratifying the populations into subsets by age, calculating an age-specific death rate for each group, then deriving a composite death rate by weighting each age category in proportion to its occurrence in a standard population. Oregon's age distribution for 1990 is the standard used in this report. For example, only 6.7 percent of the resident African Americans were 65 or older, compared to 13.7 percent of all residents. Consequently, the crude death rate was lower for African Americans (724.6 per 100,000 population) than for Whites (889.0). However, when compensation is made for the influence of the young African American population, the age-adjusted death rate is two-thirds again as high (1,209.3) as the crude rate.

Age-adjusted rates are meaningful only in comparison to other rates standardized in the same way and to the same population. Remaining differences among compared populations must be explained by differences other than age. Race-specific age-adjusted death rates are calculated only for causes which met the minimum criteria of 50 deaths. When fewer deaths occurred, age-specific rates may be used. All rates are per 100,000 population per year.

The ***comparative mortality figure*** is the ratio of the age-adjusted death rate for a non-White group to the White death rate. A comparative mortality figure of less than one indicates the group under comparison has a lower death rate than Whites, while a figure of greater than one indicates a higher rate. For example, the American Indian comparative mortality figure for heart disease was 0.798 indicating that their age-adjusted death rate for this cause was only 79.8 percent of that for Whites (i.e., 20.2 percent lower).

A measure of premature mortality is the ***years of potential life lost***. This statistic emphasizes mortality occurring in younger age groups and assumes that each individual has 65 "productive" years, so that a death at age 21, for example, results in 44 (65 minus 21) years of life lost. The number of years are then summed for all individuals. Causes may be compared and ranked within each racial/ethnic category. For example, unintentional injuries are the leading cause of years of potential life lost for all groups except the Chinese and Japanese.

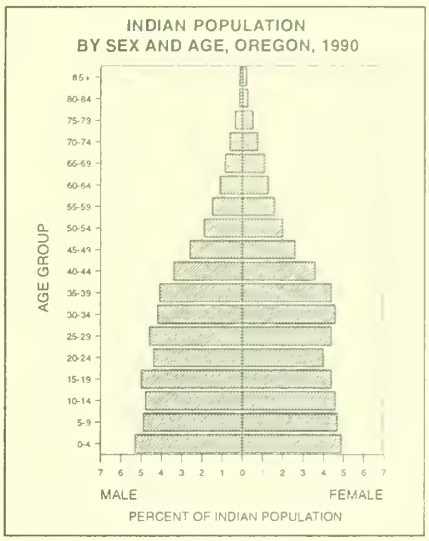
The ***years of potential life lost index*** is used to compare the extent of premature death of minority races to Whites. It adjusts for the number of individuals in each racial group as well as for their age distribution. The index value for a race is the ratio of observed years of life lost to the

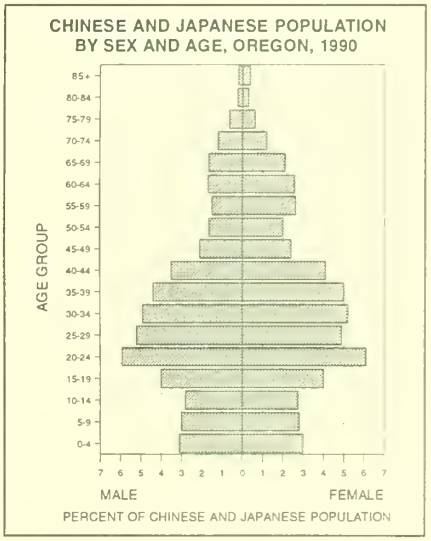
expected number of years based on the value for Whites. For example, the American Indian years of potential life lost index of 1.302 means that proportionately 30.2 percent more years of potential life were lost by American Indians than by Whites. Subsets may be compared to Whites in the same manner as the comparative mortality figure.

Statistically significant differences are indicated by ".01",".02", or ".05", where appropriate, in the Appendices. (Subsequent use of the terms "significant" or "significantly" means statistically significant.) For example, the years of potential life lost index for deaths due to lung cancer for African Americans was 1.403 with the probability less than or equal to 0.05; this means that the likelihood of a value this different (from Whites) occurring by chance alone is no more than one in twenty. Similarly, a significance level of 0.01 indicates that a value as different from the norm as the one under consideration would occur only one or fewer times out of 100 due to chance alone. The formulae for the above have been described by Kleinman;[4] age-adjusted rates are calculated by the direct method and years of potential life lost by the indirect method.

In summary, crude death rates, age-specific death rates and the number of years of potential life lost are actual counts while age-adjusted rates, comparative mortality figures, and years of potential life lost indices are statistically created values that enable the comparison of different populations regardless of the age-distribution of the populations. These measures of mortality are calculated for the leading causes of death. Examples of the causes and their International Classification of Disease codes are listed in Table 1.

Causes discussed in the narrative include the leading causes of death of children and adults as well as those that are less common but often of interest to the community (e.g., AIDS, drug use). Drug use is not listed in the summary tables of Oregon data (but is in Appendix 14) because it is not a standard cause of death category; it includes certain deaths counted as mental disorders, unintentional injuries, suicide, and injuries undetermined whether intentionally or unintentionally inflicted. Finally, causes unique to the first year of life, such as SIDS, perinatal conditions, and congenital anomalies, are not discussed herein but will be included in a future report on infant death; the number of deaths and years of potential life lost are included in the summary tables, however.





Years of potential life lost index:

A measure of the extent of premature death in a minority group relative to Whites after controlling for the age structure of the groups.

Some diseases, such as diabetes among American Indians, are important causes of morbidity and mortality, but are not discussed here because they did not meet the minimum criteria of causing at least 50 deaths. (However, data are included in the tables and appendices.) Recently, the Center for Health Statistics began recording all causes (listed on the death certificate), not just the underlying cause. In the furture, more detailed information that includes these contributing causes will be available.

Because the number of deaths was very small for individual Asian groups (e.g., Filipino), meaningful statistics could not be calculated for each group; combining all Asians into one group was not deemed useful because of the disparate characteristics of many of the groups. Additionally, some groups were not identifiable on the death certificate except by country of birth (e.g., Laotian). However, aggregating the Chinese and Japanese—who had low death rates—into one group yielded an adequate number of events to calculate reliable statistics. This group should not, however, be considered representative of all Asians.

Age-adjusted death rates are used to compare the mortality profile of African Americans who were residents of Oregon to all African Americans nationwide. These data are from the national Center for Disease Control and Prevention's WONDER (Wide-ranging Online Data for Epidemiological Research) system. Rates are based on the most recent national data, 1986-1992. Because this system includes only the racial categories "White," "Black," and "Other," comparisons can not be made for the other groups discussed in this report.

RESULTS AND DISCUSSION

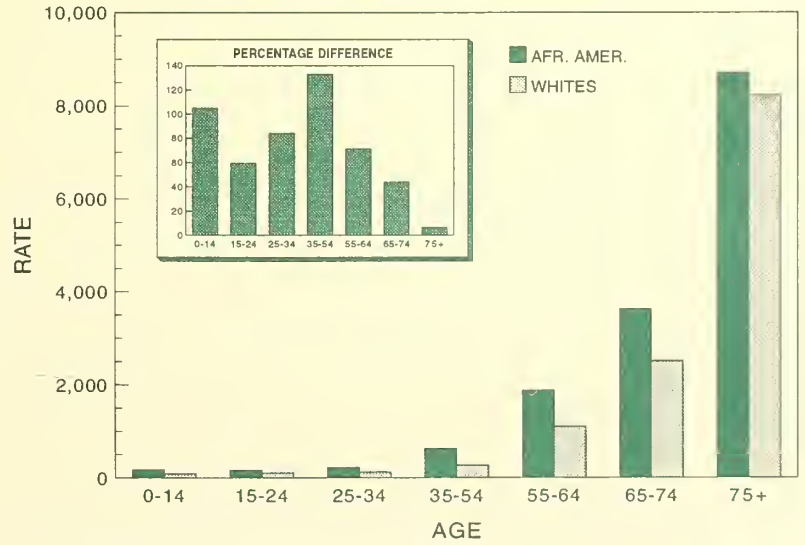
◄ AFRICAN AMERICANS ►

During 1986-1994, African Americans were apparently at less risk of death than Whites; the crude death rates were 724.6 per 100,000 population and 914.0, respectively. But this is a reflection of the relative youth of the African American population rather than the actual risk of death within each age group. When age-adjusted death rates are calculated, the mortality risk for African Americans can be compared to Whites in a more meaningful fashion. The age-adjusted death rate for African Americans was 1,209.3 per 100,000 population versus 887.8 for Whites, a 36 percent difference. (Unless otherwise noted, age-adjusted or age-specific death rates are used in all subsequent rate comparisons between minority groups and Whites.) Not only were African American residents more apt to die, they were more apt to die prematurely (i.e., before age 65). After adjusting for differences in population age structure, they were found to have lost proportionately twice as many years of potential life: the years of potential life lost index was 2.03.

African Americans lost proportionately twice as many years of potential life as did Whites.

The rank order of the three leading causes of death among African Americans were identical to those for Whites. Heart disease was the leading cause of death for both groups, followed by cancer and cerebrovascular disease.

FIGURE 1. AGE-SPECIFIC DEATH RATES FOR AFRICAN AMERICANS AND WHITES, OREGON RESIDENTS, 1986-1994



CAUSES OF DEATH FOR AFRICAN AMERICANS, 1986-94		
All Causes		3,066
1	Heart Disease	728
2	Cancer	652
3	Cerebrovascular Disease	241
4	Unintentional Injuries	184
5	Homicide	151
6	Diabetes	106
7	Pneumonia & Influenza	77
8	Perinatal Conditions	75
9	COPD	74
10	Alcoholism	73
11	AIDS	59
12	SIDS	53
13	Suicide	45
14	Hypertension	41
15	Other Artery Disease	37

Unintentional injuries ranked fourth among African Americans (versus fifth for Whites) while homicide ranked fifth (versus seventeenth for Whites). Moreover, the age-adjusted death rates and years of potential life lost indices for African American Oregonians were significantly elevated for most causes compared to the values for Whites. Table 3 lists the crude death rates for the 20 leading causes of deaths among African Americans.

CAUSATION BY AGE

The total death rate among African Americans was elevated in every age group with the largest disparity occurring among the middle-aged; the death rate for 35- to 54-year-olds was 2.4 times higher than it was for similarly aged Whites. Proportionately, twice as many deaths occurred among African Americans under 55 years of age compared to Whites.[5] The differences were less extreme among older African Americans. Figure 1 illustrates the age-specific death rates for African Americans compared to Whites.

Ages 0 to 14. An African American child under 15 years of age was over twice as likely to die than was a White child. Most deaths (80 percent) in this age group occurred during infancy. (A future report will focus on infant death and its causes.) Among African American children less than 15 years-old, perinatal conditions were the leading cause of death (Table 4). SIDS ranked second followed by unintentional injuries and congenital anomalies. These were also the four leading causes of death for White children, although the rank order was different. However, the fifth leading cause of death for young African American children was homicide; this was the sixth leading cause for Whites. An African American child was three times more likely to be murdered before his or her fifteenth birthday than was a White child.

Nearly half of the deaths of African American youth resulted from homicide.

Ages 15 to 24. The risk of death was 62 percent higher for an African American aged 15-24 than for a similarly aged White.[6] Almost *half* (47 percent) of the African American deaths in this age group were homicides compared to 6.4 percent of the White deaths. African Americans 15-24 years old were far more apt to be murdered than other racial groups; their homicide rate (72.5) was *twelve* times that of Whites (6.2). Figures 2 and 3 illustrate the disproportionate role of homicide in the deaths of young African Americans. Ranking second were unintentional injuries (36.2). Unlike many

causes, unintentional injuries posed less of a risk to young African Americans than to Whites; the White rate was 53.2. Ranking third were suicides; here the African American death rate was slightly elevated compared to the White rate (20.1 versus 17.7).

Ages 25 to 34. African Americans in this age group were 88 percent more likely to die than were similarly aged Whites. The death rates were 219.7 and 116.7. As among their younger counterparts, homicides claimed more African Americans aged 25-34 than any other cause; homicide ranked fifth for Whites. At 57.5, the African American homicide rate was over seven times higher than the White rate of 7.7. Ranking second were unintentional injuries. The African American rate (37.9) was little different than that of Whites (39.3). AIDS was the third leading cause for both African Americans and Whites, but the rate for African Americans (23.5) was almost twice that for Whites (12.7). Ranking fourth for both groups was cancer, but here again the rate for African Americans was higher, 17.0 versus 11.5 for Whites. Heart disease, the fifth leading cause of death among African Americans, was almost three times as common than among Whites; the death rates were 14.4 and 5.2.

Homicide was the leading cause of death for African Americans aged 25-34.

Ages 35 to 54. Proportionately 2.4 times as many 35-54 year old African Americans died as did Whites. The death rates were 621.0 and 261.6. These middle-aged African Americans were 45 percent more likely to die as a consequence of malignant neoplasms compared to Whites, 112.0 versus 77.2; this was the leading cause of death for both groups. Heart disease ranked second for both African Americans and Whites, but African Americans were more than twice as likely to succumb to this disease; the death rates were 109.9 and 48.8, respectively. African Americans in this age group were over two times more likely to die from unintentional injuries than were Whites; the death rate was 69.4 for the former and 32.5 for the latter. Alcoholism ranked fourth with a rate of 39.5 among African Americans compared to 12.8 for Whites, a threefold difference. Nearly, three times higher was the African American death rate (38.4) for the fifth leading cause of death, AIDS. The White rate was 13.7.

An African American 35-54 years old was 2.4 times more likely to die than was a White of the same age.

Ages 55 to 64. African Americans ages 55-64 were 71 percent more likely to die than similarly aged Whites. The death rates were 1,881.0 and 1,099.9, respectively. Cancer was the leading cause of death in this age group for both

FIGURE 2. PERCENTAGE OF DEATHS BY CAUSE AND AGE, AFRICAN AMERICAN OREGON RESIDENTS, 1986-1994

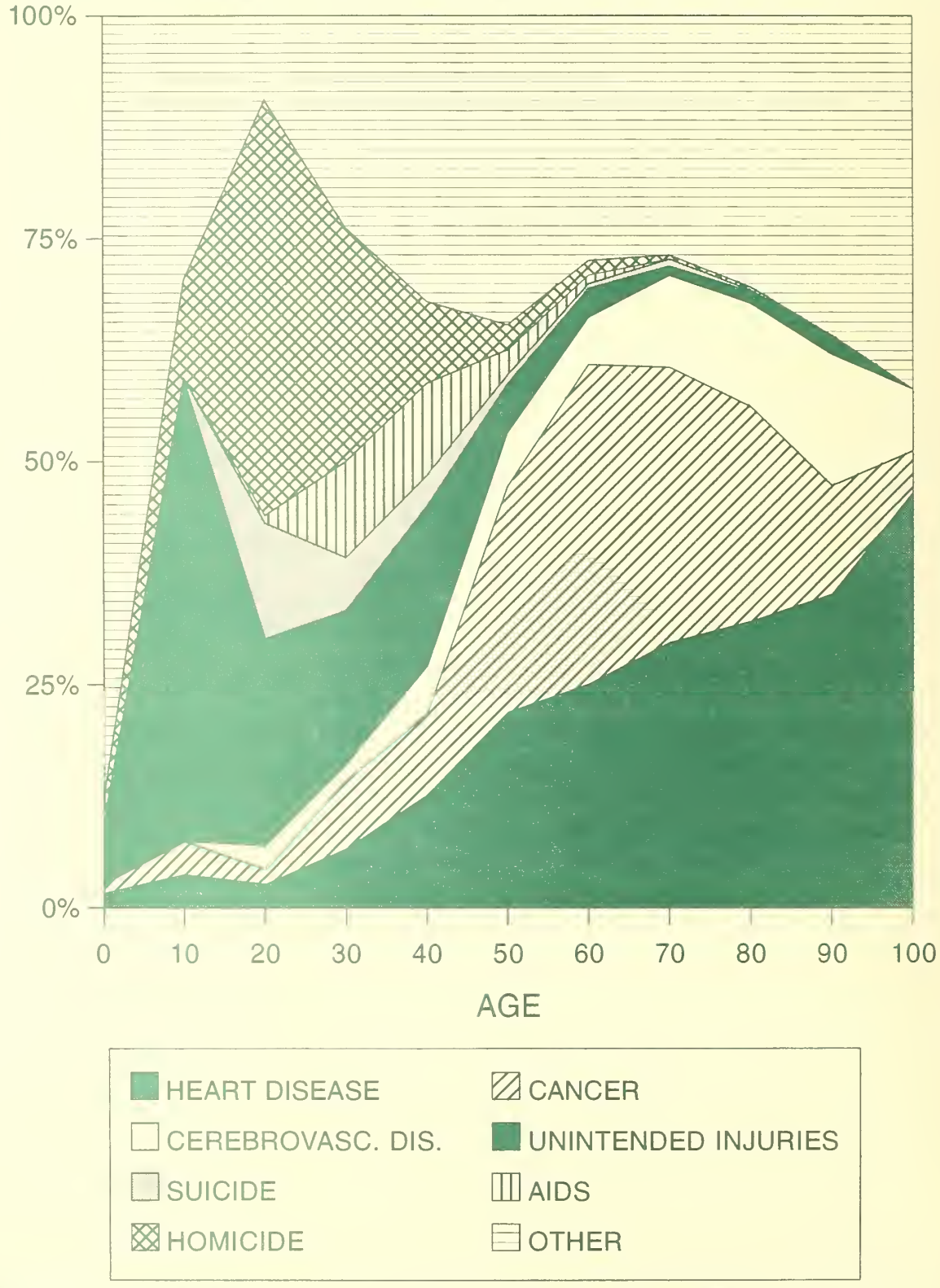
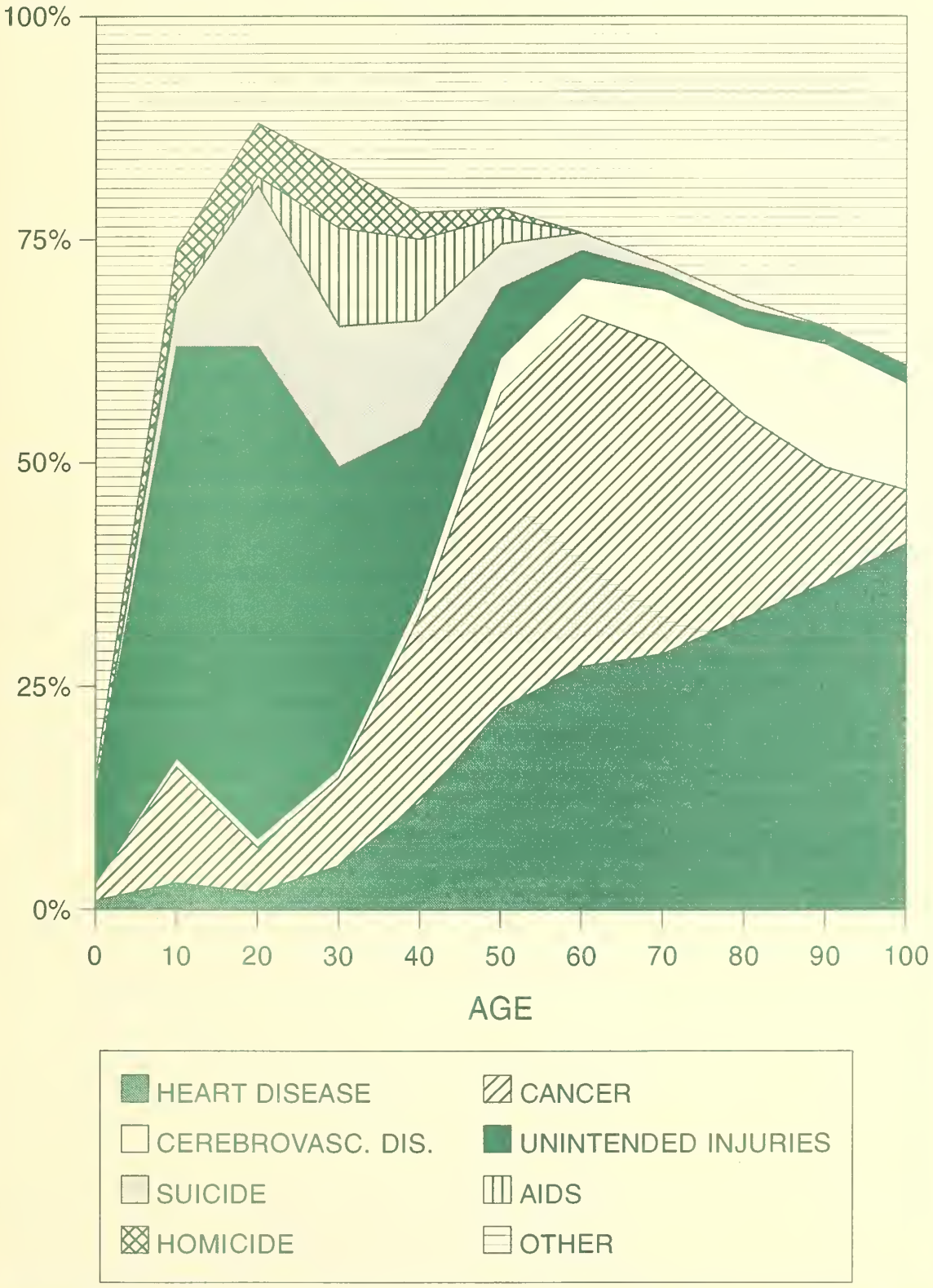


FIGURE 3. PERCENTAGE OF DEATHS BY CAUSE AND AGE, WHITE OREGON RESIDENTS, 1986-1994



Whites and African Americans. However, the death rate was 57 percent higher for African Americans, 673.4 compared to 429.2. Heart disease ranked second for both groups, but again the rate for African Americans (471.4) was more than one-half again (56 percent) as high as for Whites (301.9). Cerebrovascular disease not only ranked third for African Americans, compared to fourth for Whites, but the African American death rate of 98.8 was 2.4 times higher than the White rate (41.3). Alcoholism, the fourth leading cause, continued to take a toll among African Americans at a rate far greater than among Whites; the death rates were 80.8 and 38.6 respectively. Ranking fifth among African Americans was diabetes; at 67.3 their death rate was over two times higher than the rate for Whites (26.8).

The diabetes death rate for African Americans 65-74 years old was three times higher than for Whites.

Ages 65 to 74. The differences in the death rates of African Americans compared to Whites lessened after middle age. Nonetheless, the African American death rate for 65- to 74-year-olds was 44 percent higher than for White 65- to 74-year-olds. Among these older Oregonians, there was a greater degree of similarity between African Americans and Whites in the causes of mortality. Heart disease and cancer were the two leading causes for both groups. However, as with younger age groups the death rates for African Americans were elevated. The following rates were recorded: cancer 1,116.7 for African Americans compared to 865.1 for Whites; heart disease 1,077.6 and 734.6. Cerebrovascular disease ranked third among African Americans with a rate of 374.1, more than twice as high as for Whites (144.0). Ranking fourth among African Americans was diabetes with a rate three times higher than Whites, 178.7 versus 58.1. The fifth leading cause of death for African Americans was chronic obstructive pulmonary disease (COPD), but unlike most causes the rate for African Americans (106.1) was only about half the rate of Whites (199.2).

Age 75+. The smallest discrepancy in death rates between the races was among persons 75 or older; the African American death rate (8,686.2) was just 5.9 percent higher than the death rate for like-aged Whites (8,204.4). The rank order by cause was also similar. Both elderly African Americans and elderly Whites succumbed to heart disease more frequently than any other cause. The death rates were 2,927.0 and 2,877.4 respectively. Cancer ranked second for both groups; the death rate for African Americans (1,695.6)

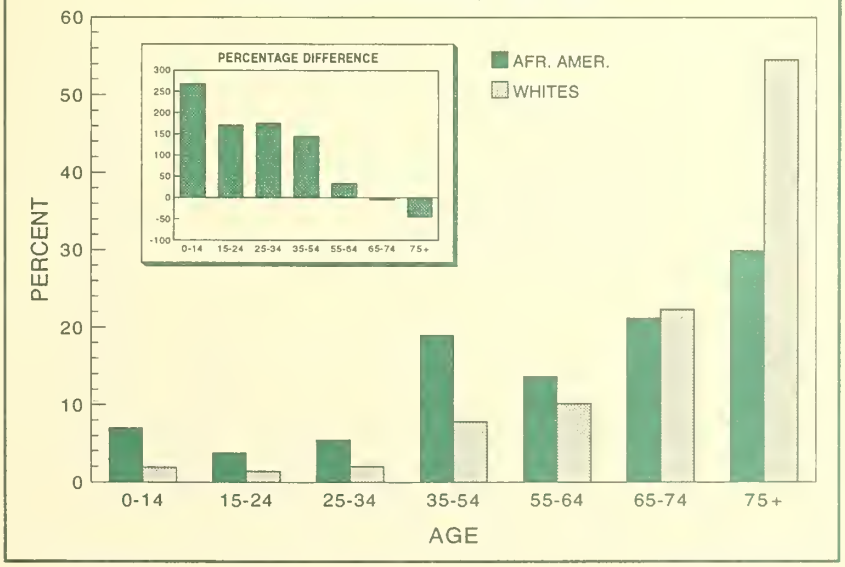
was 16 percent higher than the rate for Whites (1,458.9). Cerebrovascular disease was the third leading cause of death for African Americans (1,070.4) as well as for Whites (945.2). Ranking fourth among African Americans was diabetes. As among younger African Americans, the rate for this cause was greatly elevated compared to the rate for Whites, 397.8 versus 147.3. Lastly, pneumonia and influenza ranked fifth. Unlike the previous four causes it occurred proportionately less often in African Americans (303.1) than in Whites (421.9). Among the majority population, over half of all deaths occurred to persons 75 or older, but among African Americans less than a third of the deaths occurred in this age group (Figure 4).

Median Age At Death. One measure of longevity is the median age at death. African Americans living in Oregon had a median age at death of 65; that is, one-half of all deaths among African Americans occurred by 65 years of age. This was fully 11 years earlier than the median age at death for Whites (76). The difference was greatest for African American males, whose median age at death was 61 compared to 73 for White males; for females the ages were 69 and 79, respectively.

The median age at death for African Americans was 65 compared to 76 for Whites.

The median age at death varies by cause: young adults are far more likely to die from unintentional injuries than from cerebrovascular disease. Table 5 lists the median age at death by cause and sex for each race/ethnicity. In no instance

FIGURE 4. PERCENTAGE OF DEATHS BY AGE FOR AFRICAN AMERICANS AND WHITES, OREGON RESIDENTS, 1986-1994



was the median age at death higher for African Americans than for Whites, and in most cases, it was far lower. The largest disparity occurred in the median age for pneumonia and influenza deaths; for Whites the age was 84 but for African Americans only 72, a 12-year difference. Life expectancy for African Americans nationally is only now at the level achieved for Whites three to four decades ago.[7] In 1993 (the year of the most current national data), African American life expectancy declined and the gap between African Americans and Whites widened.[8]

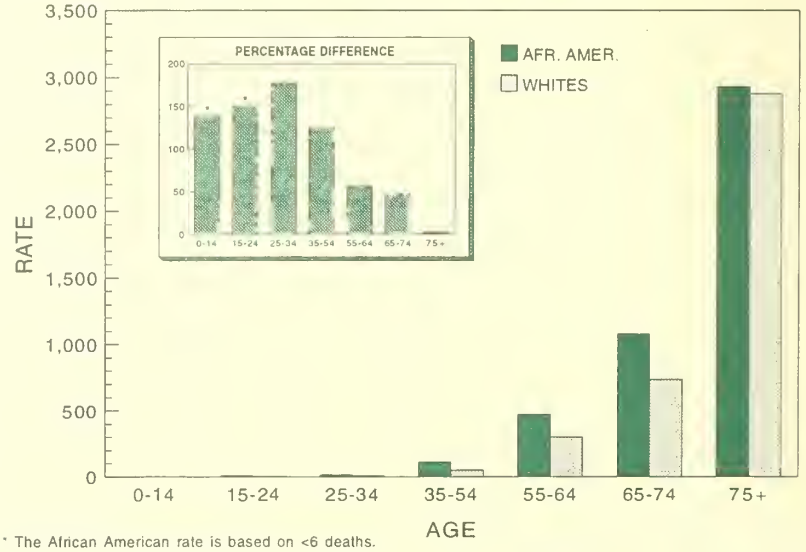
CAUSES OF DEATH

The risk of death from most chronic diseases was significantly higher for African Americans than for Whites.

African Americans had *significantly* elevated age-adjusted death rates compared to Whites for all but two of their 10 leading causes of death: pneumonia and influenza, and chronic obstructive pulmonary disease.[9] They also had the highest death rates of any race for all but three of their 10 leading causes; Whites had the highest death rates for chronic obstructive pulmonary disease while American Indians had the highest rates for unintentional injuries and alcoholism (Table 6). The years of potential life lost indices for African Americans were higher than for Whites for nine of their 10 leading causes of death.

Heart Disease. The preeminent cause of death among African Americans was heart disease, although it accounted for proportionately fewer African American deaths than White

FIGURE 5. AGE-SPECIFIC HEART DISEASE DEATH RATES FOR AFRICAN AMERICANS AND WHITES, OREGON RESIDENTS, 1986-1994



* The African American rate is based on <6 deaths.

deaths. Nonetheless, African Americans were 24 percent more likely to die in a given year from heart disease than Whites. The age-adjusted death rates were 328.2 and 265.5, respectively. Not only was the death rate significantly higher, so was the years of potential life lost index (2.17). This means that not only were African Americans more likely than Whites to die from heart disease, they were more likely to die at younger ages. African Americans lost proportionately more than two times as many years of potential life from heart disease than Whites, a reflection of the high death rates for this cause among young African Americans. The age-specific death rates for African Americans under 55 years of age were two to three times higher than for similarly aged Whites, but this disparity decreased with advancing age (Figure 5). Parenthetically, hypertension is not discussed as a cause of death in this report because, although widely prevalent among African Americans, hypertension-related deaths are usually attributed to heart or cerebrovascular disease.

African Americans were 24 percent more likely to die from heart disease than were Whites.

Major risk differentials exist between African Americans and Whites; these are thought to play a role in the elevated heart disease death rates for African Americans. Among these are smoking, hypertension, obesity, and poverty. Addiction to cigarette smoking is a significant predictor of heart disease and is more prevalent among African American males than their White counterparts; it contributes to a disproportionate share of illnesses in the African American community.[10,11] Another significant predictor is hypertension; it is 1.5 times (males) to 1.7 times (females) more prevalent in African Americans than Whites and more likely to be untreated.[12,13] Obesity is 48 percent more common in African American women than White women; researchers have suggested that the high heart disease death rates among the former may be partially explained by obesity.[13,14] Finally, lack of access to medical care, may also play a role in the elevated death rates for heart disease as well as for many other causes.[15] For example, African Americans are only half as likely as others with a comparable coronary heart disease diagnosis to undergo angiography.[16]

Cancer. African American Oregonians were 30 percent more likely to die from malignant neoplasms, the second-leading cause of death; the age-adjusted death rate was 276.8 compared to 213.2 for Whites. As with heart disease, African Americans were more likely to die prematurely, losing proportionately 34 percent more years of potential life

than Whites. Both of these differences were significant. African Americans ages 25 to 64 were half again as likely to fall victim to cancer compared to Whites in that age group (Figure 6).

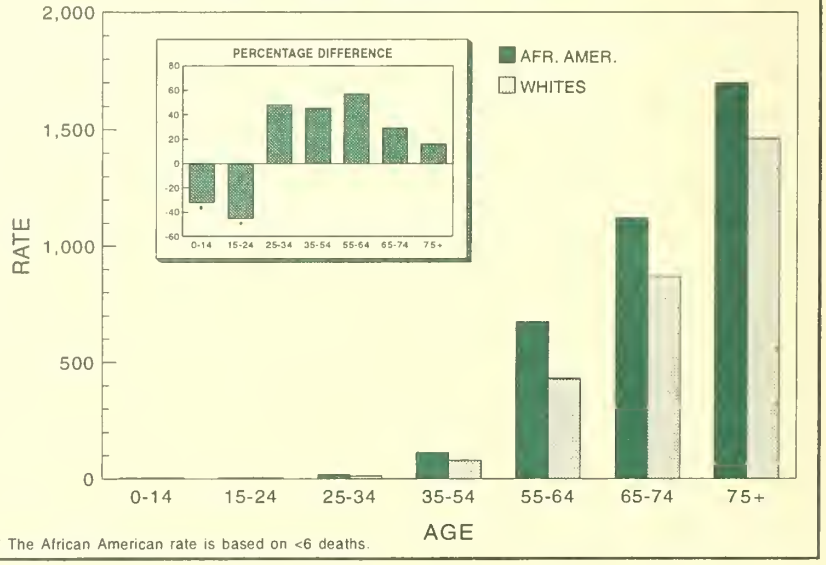
Lung cancer was the most common fatal cancer and African Americans were one-third more likely to die from this largely preventable cancer than were Whites. The age-adjusted death rates were 83.8 and 63.4, respectively. The years of potential life lost index, too, was elevated (1.40). Both these differences were statistically significant.

About 70 percent of all cancer deaths have been linked to four risk factors—tobacco, alcohol, diet, and occupation.[17] Cigarette smoking is responsible for 30 percent of all cancer deaths and up to 90 percent of lung cancer deaths. Cigarette smoking is also a contributing factor in laryngeal, oral, esophageal, bladder, pancreatic, cervical, and kidney cancers. The prevalence of smoking-related malignant neoplasms among African Americans is especially high.[18] And, as previously noted, African Americans are more likely to be smokers. African Americans who do smoke are more likely to smoke mentholated cigarettes; these cigarettes have been found to pose an increased risk of lung cancer in men.[19]

African Americans were 30 percent more likely to die from cancer than were Whites.

Alcohol is an etiologic factor in cancer of the mouth, larynx, tongue and esophagus.[18] Alcohol consumption is higher among African Americans but this may be largely explained by the association between alcohol and poverty.[18,20] Dietary factors are thought to account for 35 percent of all cancer

FIGURE 6. AGE-SPECIFIC CANCER DEATH RATES FOR AFRICAN AMERICANS AND WHITES, OREGON RESIDENTS, 1986-1994



deaths. However, rigorous studies of the correlation between diet and cancer in African Americans are lacking.[18]

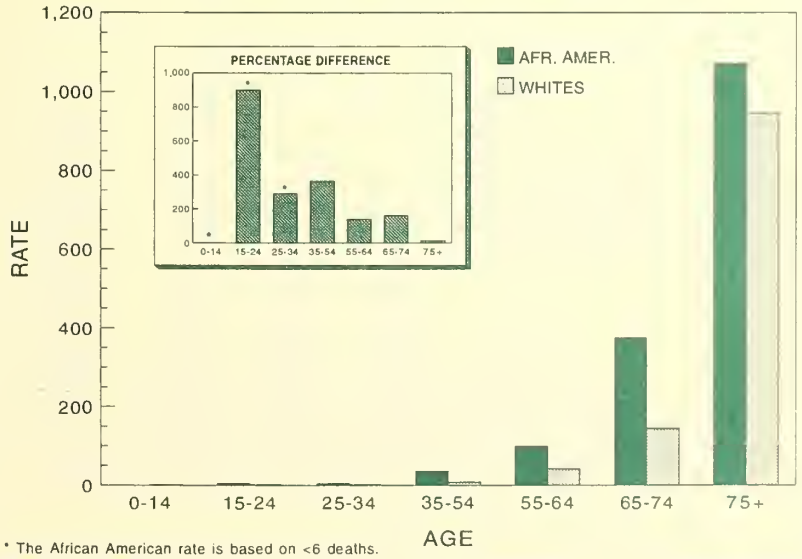
Occupational exposures are estimated to account for four percent of U.S. cancer deaths. African Americans are over-represented in "high hazard" jobs in part due to having fewer years of education (as a group) and discriminatory employment practices.[21] Exposure to carcinogens and other disease-producing substances in these jobs may contribute to the elevated rate of fatal malignant neoplasms.

National data suggest that among African Americans, cancer diagnosis occurs later in the progression of the disease than in Whites (although there is no delay in diagnosis once a symptom is noted).[22] The five-year survival rate for all cancer sites combined is 50 percent for Whites but only 37 percent for African Americans.[23] The disparity in survivorship is greatest for cancers of the corpus uteri in women and oral cavity and pharynx in men.[22] Racial disparities in survival can be explained, at least in part, by economic factors related to access to health care early in the disease and/or access to state of the art treatment.

Cerebrovascular disease was 53 percent more likely to claim African Americans.

Cerebrovascular Disease. The third leading cause of death for African Americans and Whites was cerebrovascular disease (e.g., stroke, cerebral hemorrhage). However, African Americans were 53 percent more likely to die as a consequence of these conditions than Whites. The age-adjusted death rates were 110.9 and 72.3, respectively. Risk

FIGURE 7. AGE-SPECIFIC CEREBROVASCULAR DISEASE DEATH RATES FOR AFRICAN AMERICANS AND WHITES, OREGON RESIDENTS, 1986-1994



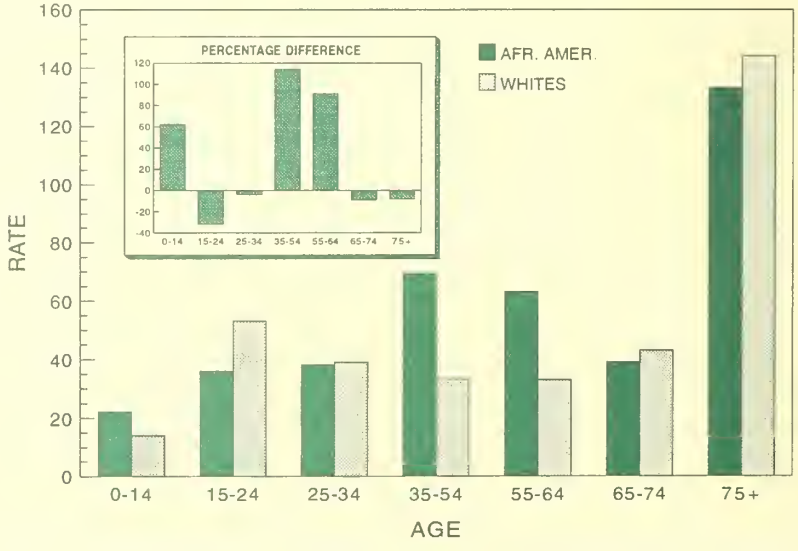
of premature death from this cause was very high among African Americans; the years of potential life lost index was 3.98. The largest disparity occurred among younger African Americans (Figure 7). Many of the risk factors for cerebrovascular disease are the same ones that lead to elevated death rates for heart disease.

Unintentional Injuries. The age-adjusted death rate for unintentional injuries was higher for African Americans than for Whites but unlike the previous three causes, the African American death rate was not the highest. Instead the Indian death rate was. Nonetheless, at 50.4 the unintentional injury death rate for African Americans was 27 percent higher than the death rate for Whites (39.6). African Americans aged 35 to 64 were about twice as likely to die from unintentional injuries than were Whites (Figure 8). African Americans also lost proportionately 17 percent more years of potential life from these causes, but this difference was not a significant one. The elevated death rate for this cause is due to injuries from other than motor vehicles. African Americans were somewhat less likely to die in motor vehicle crashes and lost proportionately fewer years of potential life than Whites; the years of potential life lost index was significantly low, 0.68.

African Americans were 27 percent more likely to die as a consequence of unintentional injuries.

The greatest disparity between African Americans and Whites in injury death rates (excluding homicides) occurred in unintentional injury deaths due to residential fires,

FIGURE 8. AGE-SPECIFIC UNINTENTIONAL INJURY DEATH RATES FOR AFRICAN AMERICANS AND WHITES, OREGON RESIDENTS, 1986-1994

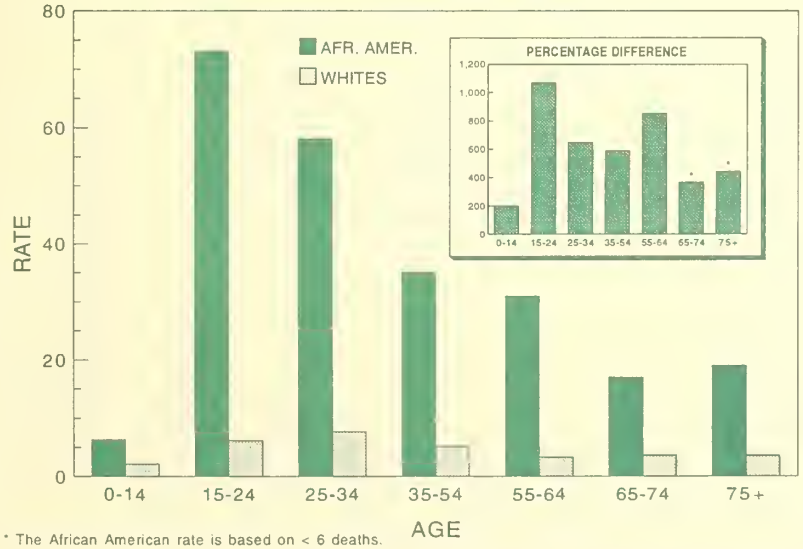


drownings, and pedestrian mishaps.[24] The death rates for these causes were elevated not only for adults but young children as well.[24] While the reasons for the increased risk among African Americans are not completely clear, previous studies demonstrated that deaths from these causes have common risk factors including poverty and alcohol consumption.[25]

Homicides. No cause of death so greatly differentiated African American Oregonians from all other Oregonians as homicide: African Americans were 7.5 times more likely than Whites to be murdered. The age-adjusted death rate for African Americans was 34.8 compared to 4.6 for Whites. Homicide resulted in more years of potential life lost than any other cause except unintentional injuries (Table 7). Figure 9 illustrates that African Americans aged 15-24 were at the greatest risk; the death rate (72.5) for this group was *twelve* times higher than the rate for similarly aged Whites (6.2). Even African American children under 15 years old were at a greater risk; they were fully three times more likely to be murdered than White children. The years of potential life lost index was 7.60; it and the age-adjusted death rate were both statistically significantly higher for African Americans compared to Whites. About one-tenth of all homicide victims in Oregon were African American, yet this minority comprises less than one-sixtieth of the state's population. Furthermore, while one in 20 African American

Homicide was over seven times more frequent among African Americans than Whites.

FIGURE 9. AGE-SPECIFIC HOMICIDE DEATH RATES FOR AFRICAN AMERICANS AND WHITES, OREGON RESIDENTS, 1986-1994



deaths resulted from homicide, only one in 198 White deaths were from this cause.

A 15- to 24-year-old African American was 12 times more likely to be murdered than was a White of the same age.

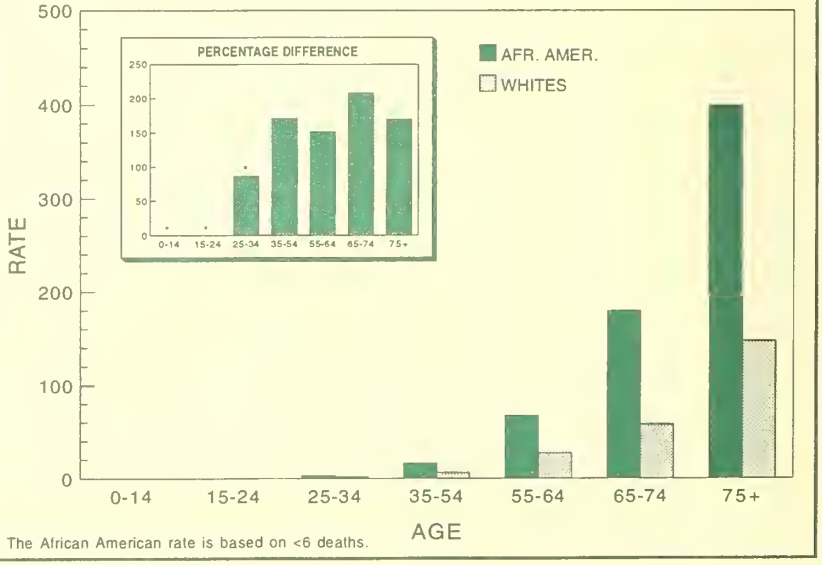
Most attempts to explain the high African American homicide rate have focused on the greater poverty of this group. Some analyses show that when poverty, race, and regional differences are accounted for, poverty emerges as the most significant correlate of homicide.[26-28] (In Multnomah County, poor Whites were nearly three times as likely to be murdered as wealthy Whites.[29]) Household crowding, in particular, has been found to be a significant predictor of elevated homicide rates.[30]

Diabetes Mellitus. Diabetes, the sixth leading cause of death among African Americans, was 2.8 times more likely to claim members of this minority; the age-adjusted death rate was 47.7 compared to 17.3 for Whites. Both the age-adjusted death rate and the years of potential life lost index (2.34) were statistically significantly higher for African Americans compared to Whites. Death rates for this disease climb sharply among the elderly (Figure 10).

Nationally, the African American diabetes prevalence is 21 percent higher than for all races combined, 3.8 percent versus 3.0.[13] Moreover, complications arising from diabetes are more common among African Americans than Whites.[18] Research on African Americans and diabetes has centered on the association of the disease with obesity and hereditary factors. Investigations by the National Institute of

The disparity in age-adjusted diabetes death rates between African Americans and Whites was second only to that seen for homicides.

FIGURE 10. AGE-SPECIFIC DIABETES DEATH RATES FOR AFRICAN AMERICANS AND WHITES, OREGON RESIDENTS, 1986-1994



* The African American rate is based on <6 deaths.

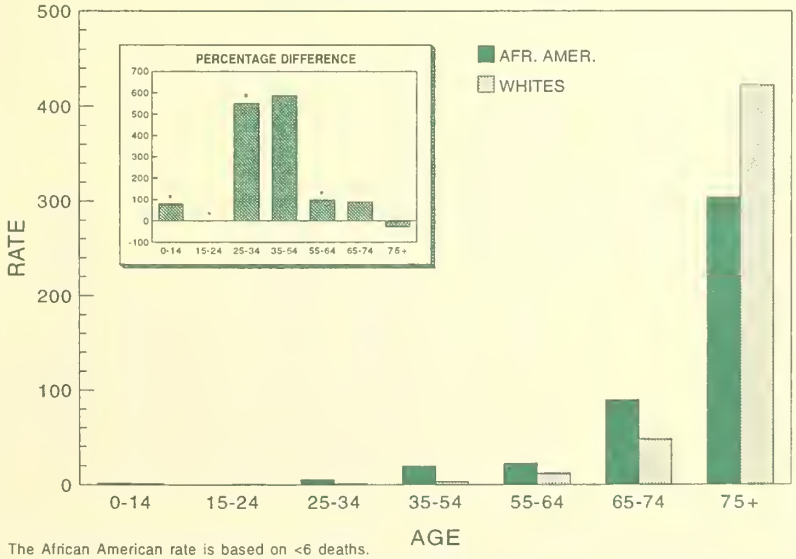
Diabetes and Digestive and Kidney Disease have linked the high level of obesity in African Americans to the increased prevalence of diabetes. However, obesity alone does not fully explain the racial disparity of the disease; among African Americans and Whites in the same weight groups, the rate of diabetes is higher in African Americans. Other factors are involved and it is thought that these include unexplained genetic factors.[31]

Pneumonia and Influenza. Although African Americans were not significantly more likely to die from pneumonia and influenza, they lost significantly more years of potential life. African Americans aged 25-54 were almost seven times more likely to die from this cause than similarly aged Whites (Figure 11). Consequently, the years of potential life lost index was very high, 3.63.

Chronic Obstructive Pulmonary Disease. The cause-specific age-adjusted death rates for African Americans were higher than for Whites for all but one of their ten leading causes of death: chronic obstructive pulmonary disease (COPD) was the exception. But while the age-adjusted death rate for this cause was significantly low, the years of potential life lost index (3.73) was significantly high, indicating that while African Americans were less likely to die from COPD, when they did die, it was at a younger age. As with lung cancer, the vast majority of COPD deaths resulted from cigarette smoking, an entirely preventable cause of death.

African Americans were less likely than Whites to die from COPD.

FIGURE 11. AGE-SPECIFIC PNEUMONIA AND INFLUENZA DEATH RATES FOR AFRICAN AMERICANS AND WHITES, OREGON RESIDENTS, 1986-1994



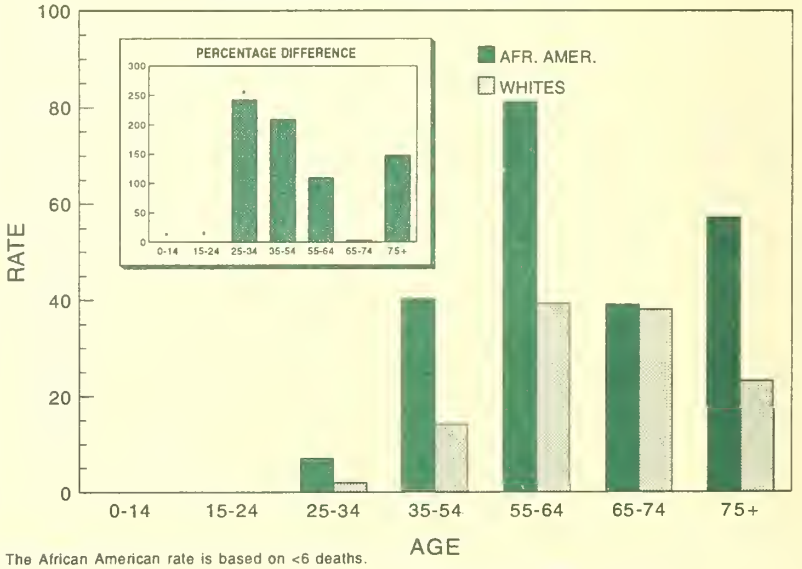
* The African American rate is based on <6 deaths.

Alcoholism was twice as likely to claim African Americans.

Alcoholism. African American Oregonians were 2.2 times more likely to die from alcoholism and its related disorders than were Whites. The age-adjusted death rates were 24.8 for the former and 11.3 for the latter. The largest disparity in death rates between African Americans and the majority population occurred among 25- to 34-year-olds; the death rate for African Americans (6.5) was over three times higher than the White rate (1.9). This was reflected in the high years of potential life lost index, 2.98. The alcoholism death rate peaked among 55- to 64-year-olds (Figure 12). Both the years of potential life lost index and age-adjusted death rates were statistically significantly higher for African Americans compared to Whites.

If deaths due to other drugs (but excluding nicotine) were included in this category, it would rank as the sixth leading cause of mortality, instead of tenth. Together, alcoholism and other drug misuse claimed 144 African Americans. As large as the disparity in the alcoholism death rate was, the disparity for drug-caused deaths was even higher. (This is a non-standard cause category and includes certain deaths counted as mental disorders, unintentional injuries, suicides, and overdoses undetermined whether intentionally or unintentionally inflicted.) At 19.4, the age-adjusted drug death rate for African Americans was 3.5 times higher than the White rate (5.5). African Americans also lost proportionately almost three times as many years of potential life; the years

FIGURE 12. AGE-SPECIFIC ALCOHOLISM DEATH RATES FOR AFRICAN AMERICANS AND WHITES, OREGON RESIDENTS, 1986-1994



* The African American rate is based on <6 deaths.

of potential life lost index was 2.98. Most of the deaths (44) occurred among 35- to 54-year-olds; the death rates for this group and 55- to 64-year-olds were about five times higher than the White rates.

African American males report higher rates of heavy drinking after 30 years of age compared to White males (where heavy drinking is concentrated in 18- to 25-year-olds).[32] This pattern of late onset drinking, when it leads to prolonged heavy consumption, is thought to put African American men at greater risk of alcohol-related diseases.[32] While the prevalence of heavy drinking declined for the majority population during 1984-1992, among African Americans and Hispanics the prevalence has remained stable.[33] African Americans have also been reported to seek help later in the progression of alcoholic diseases than their White counterparts.[34]

Drug Deaths by Race and Age, Oregonians, 1986-1994

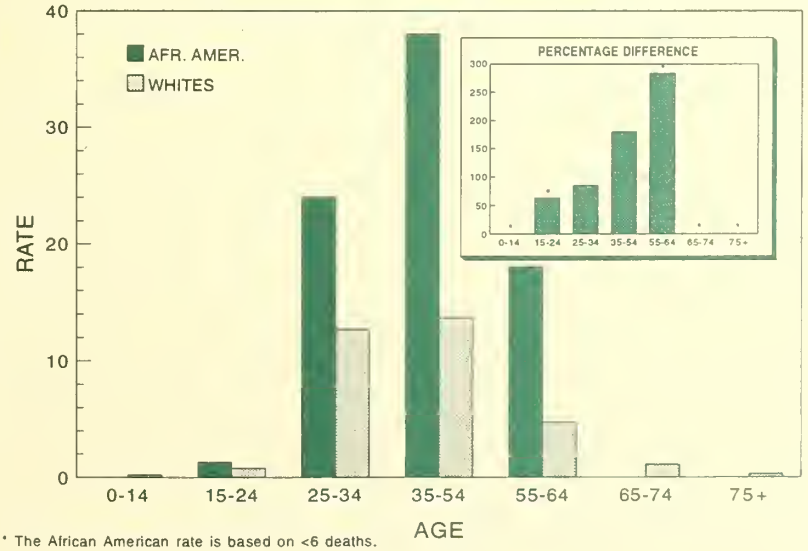
Age	White	African American
0-14	0.2	1.6
15-24	3.6	2.7
25-34	9.0	20.9
35-54	9.9	46.9
55-64	4.9	26.9
65-74	3.6	5.6
75+	4.2	0.0

Rates per 100,000 population.

Acquired Immune Deficiency Syndrome. The epidemic of AIDS deaths has shown no sign of abating and especially hard hit are African American Oregonians. At 15.8, their age-adjusted death rate was 2.5 times higher than the White rate of 6.4. The years of potential life lost index was similarly elevated (2.18). African Americans aged 35-54 were at greatest risk (Figure 13).

The disparity in death rates is a reflection of the infection rates. The reported infection rate for Oregon African Americans (247 per 100,000 population) is over twice as

FIGURE 13. AGE-SPECIFIC AIDS DEATH RATES FOR AFRICAN AMERICANS AND WHITES, OREGON RESIDENTS, 1986-1994



The AIDS death rate for African Americans was 2.5 times higher than the rate for Whites.

high as for Whites (95). Sexual transmission of AIDS is the most common route of exposure in Oregon. Among African Americans living in Oregon, a greater proportion of the AIDS cases resulted from intravenous drug use. Twenty-two percent of African American males were infected in this manner compared to 5 percent of White males. For females, the figures were 60 percent and 28 percent, respectively.[35] African Americans have been found to have shorter survival times than Whites but as with many other fatal conditions this racial difference may be a marker for poverty.[36]

Oregon Compared to the U.S. The overall age-adjusted death rate for African American Oregonians was not greatly different from their counterparts nationally; the Oregon rate was 1.0 percent less. Among all the states and the District of Columbia, Oregon ranked 23rd highest.

Although the overall death rate and ranking were close to the national average, there were some striking differences by cause. For five causes, Oregon ranked among the states with the ten highest rates (Table 8). The reasons for this are unclear but may reflect better Oregon data. (When death certificates contain incomplete or contradictory information, the Center for Health Statistics, unlike many other states, queries the certifying physician for additional data.[37])

The overall age-adjusted death rate for African Americans living in Oregon was nearly identical to the national African American death rate, but for five causes Oregon ranked among the ten states with the highest rates.

Clearly, the most striking difference between Oregon and U.S. African Americans was in the drug death rates. Oregon ranked first in the nation with a rate 2.1 times higher than the nation's. The reason for this is unknown but may reflect, at least in part, thorough toxicology screening by the Oregon Medical Examiner's Division.[38] Washington and California also ranked among the top ten states. Parenthetically, the rate for Whites was 24 percent higher than the nation's, and the state rank seventh highest.

The alcoholism death rate, too, was among the highest, ranking third after the District of Columbia and North Carolina; the rate was 41 percent above the national average. Oregon's death certificate query program may contribute to the elevated rate *vis-a-vis* other states; the Oregon rate for Whites was also substantially above (56%) the national average for Whites. Oregon ranked fifth highest among the nation's Whites. While at least some of this difference may be partially explained by the thorough query program, data from the 1994 Behavioral Risk Factor Survey revealed that Oregonians *were* more likely to report being chronic abusers of alcohol than were most other Americans.[39]

Rates for three other causes were also markedly elevated. Oregon African Americans were 27 percent more likely to die from cerebrovascular disease than their counterparts nationally; Oregon ranked fourth highest. Nearly as high (26 percent) was the rate for diabetes; it was the seventh highest rate nationally. Lung cancer, too, apparently posed a greater risk to the state's African Americans; the rate was 18 percent higher and ninth among the states. However, this may be influenced by Oregon's query program; when physicians fail to note the primary site of a fatal cancer, they are queried.

◀ AMERICAN INDIANS ▶

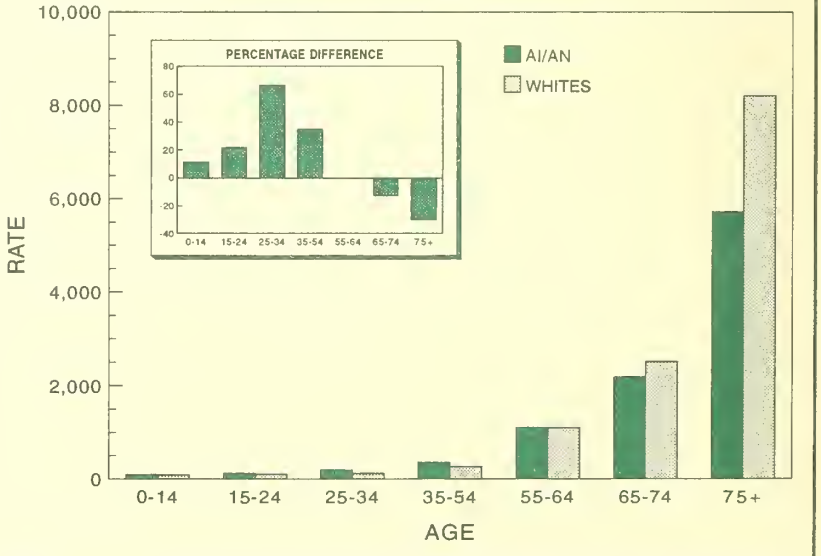
CAUSES OF DEATH FOR AMERICAN INDIANS, 1986-1994		
All Causes		1,459
1	Heart disease	330
2	Cancer	261
3	Unintentional Injuries	201
4	Alcoholism	99
5	Cerebrovascular Disease	60
6	Homicide	54
7	Suicide	50
8	Diabetes	49
9	COPD	42
10	Pneumonia & Influenza	41
11	SIDS	24
12	Perinatal Conditions	15
13	AIDS	14
14	Arteriosclerosis	13
14	Congenital Anomalies	13

Like African Americans, the mortality experience of American Indians, including Alaska Natives, (AI/AN) was worse than the crude death rate (400.1 per 100,000 population) would indicate. However, although substantially higher, the age-adjusted death rate for American Indians was 14 percent lower than the rate for Whites, 761.9 compared to 887.8. At the same time, however, the years of potential life lost index was 30 percent higher, a significant difference. This apparent paradox, in fact, illustrates the hazard faced by young American Indians; they were much more apt to die prematurely than were Whites. The rank order of the five leading causes of death among American Indians was the same as for Whites only for the first two causes, heart disease and cancer. Unintentional injuries ranked third for American Indians but fifth for Whites. Following at fourth, but twelfth for Whites, was alcoholism. Cerebrovascular disease was the fifth most common cause of death for American Indians but third for Whites.

CAUSATION BY AGE

Compared to Whites, the greatest risk of premature death for an American Indian was between ages 25 and 34. However, for those American Indians who reached their sixty-fifth birthday the risk of death was less than for Whites (Figure 14).

FIGURE 14. AGE-SPECIFIC DEATH RATES FOR AMERICAN INDIANS AND WHITES, OREGON RESIDENTS, 1986-1994



This has been referred to as the mortality "crossover." It is thought that "the crossover is a result of differential early mortality which selects the least robust persons from the disadvantaged population at relatively earlier ages so that, at advanced ages, the more disadvantaged population has proportionately more robust persons."[40]

Ages 0 to 14. The death rate for Indian children was 15 percent higher than the rate for White children, 91.6 compared to 79.6. Sixty percent of the deaths occurred during infancy. While the four leading causes of death among Indian children were the same as for Whites, the rank order was very different (Table 4). Unintentional injuries ranked first among American Indians (23.4) compared to fourth for Whites (13.5). SIDS ranked a close second followed by perinatal conditions and congenital anomalies.

Ages 15 to 24. In this age group, American Indians were proportionately 23 percent more likely to die than Whites. The death rates were 118.8 and 96.4. Nine in ten deaths resulted from injuries. With a rate of 64.8, unintentional injuries were the leading cause followed by suicide (27.8) and homicide (13.9). These are the same three causes as for Whites but in each case the rates were higher for American Indians. The American Indian unintentional injury death rate was 22 percent higher than the rate for Whites (53.2). Compared to the White suicide rate (17.7), the rate for American Indians (27.8) was 57 percent higher while the homicide rate (13.9) was two times higher than for Whites (6.2).

Among American Indians 15-24 years old, nine in ten deaths resulted from injuries.

Ages 25 to 34. An American Indian in this age group was at a 70 percent greater risk of death compared to Whites. The rates were 198.7 and 116.7. Moreover, each of the five leading causes were potentially preventable. The death rate (86.3) for the leading cause, unintentional injuries, was over twice as high as for Whites (39.3). At 29.3, the homicide rate was almost four times higher than the White rate (7.7). Suicide, the third leading cause, occurred 30 percent more often among American Indians; the rates were 24.6 versus 18.9 for Whites. The epidemic of alcoholism first becomes apparent in this age group; alcoholism was the fourth leading cause for American Indians but eighth for Whites. With a rate of 15.4, American Indians aged 25-34 were eight times more likely to die from this disease than were Whites the same age (1.9). AIDS ranked fifth with a rate of 10.8, 15 percent less than the White rate (12.7).

FIGURE 15. PERCENTAGE OF DEATHS BY CAUSE AND AGE, AMERICAN INDIAN OREGON RESIDENTS, 1986-1994

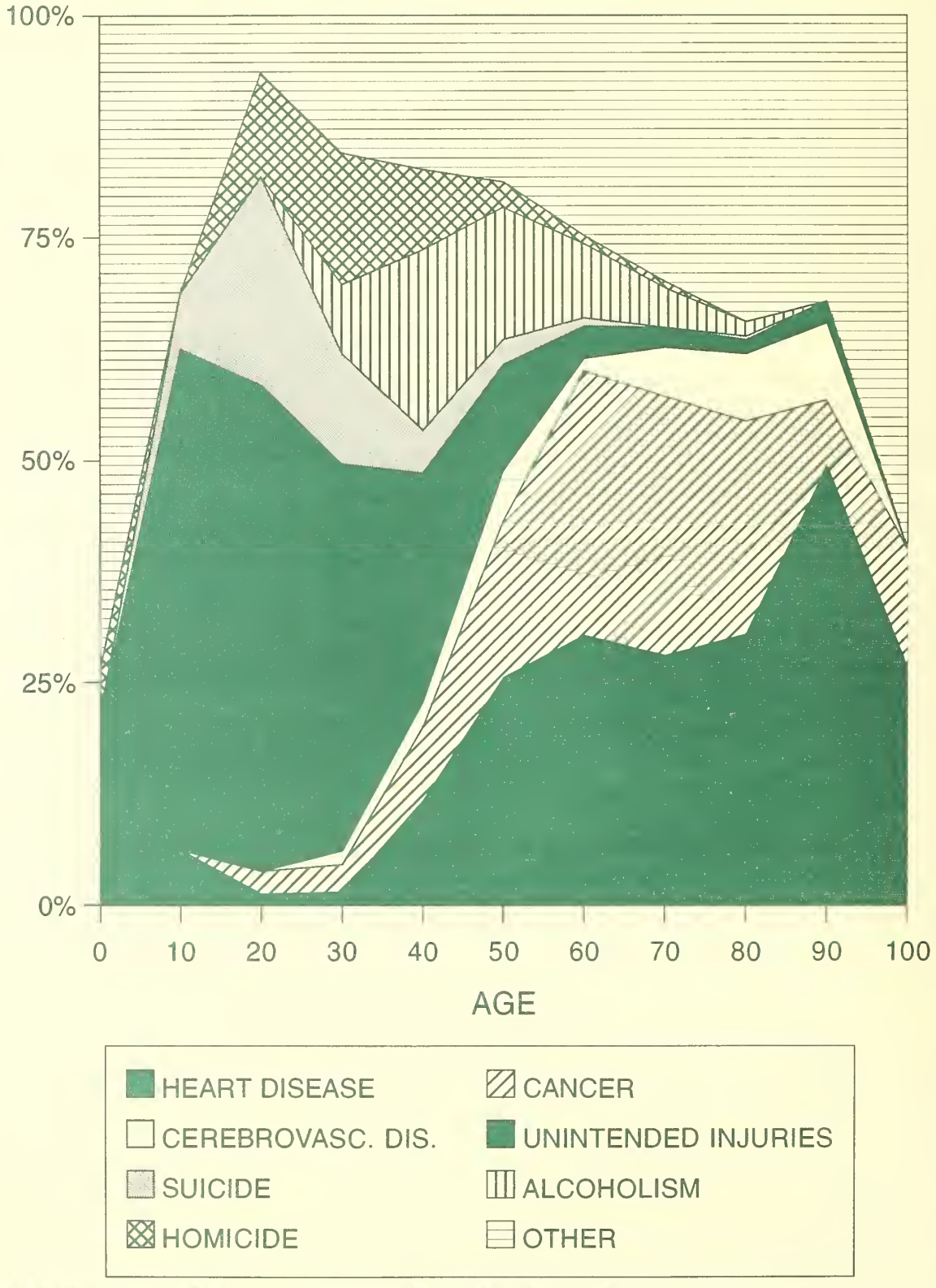
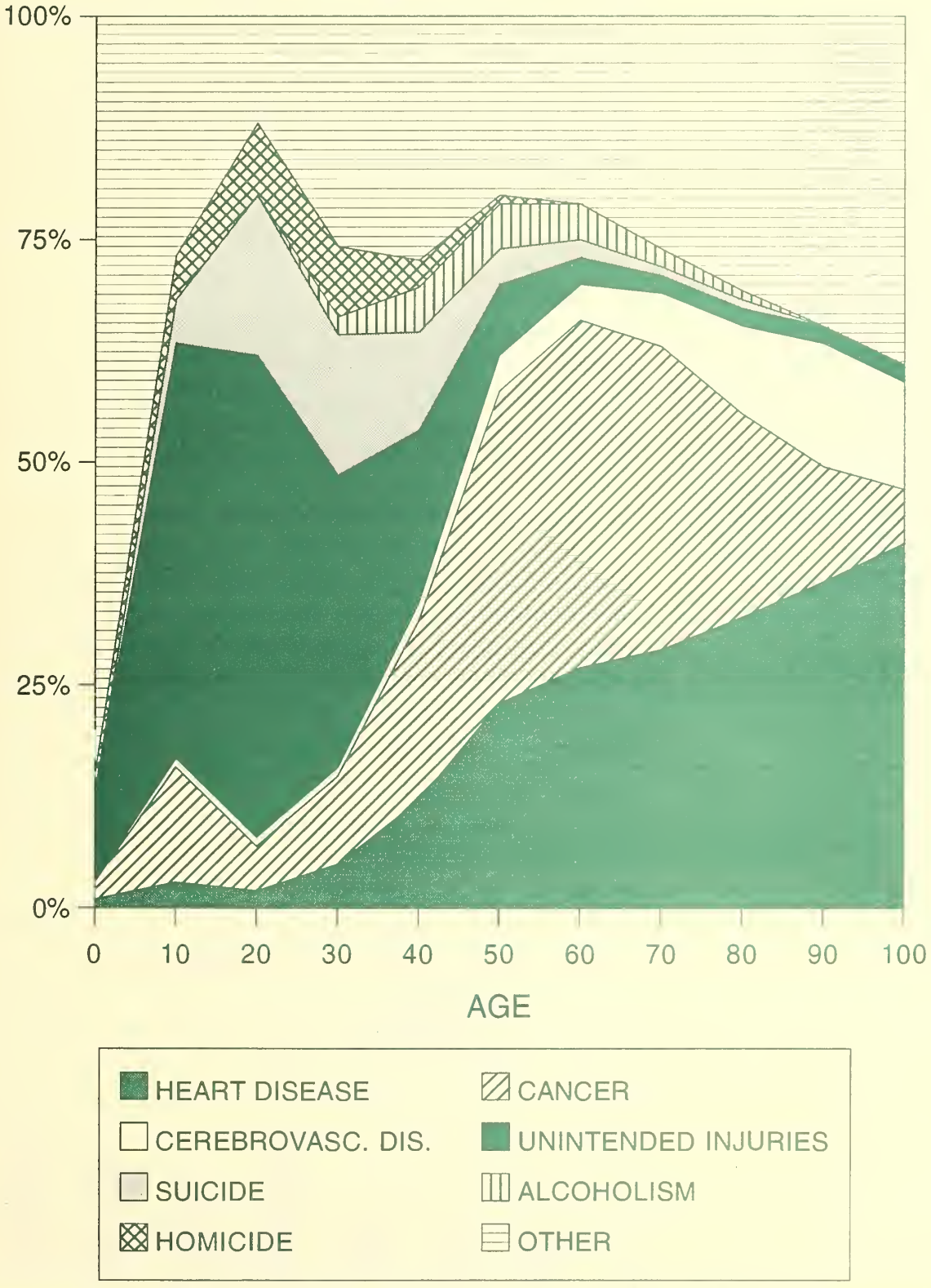


FIGURE 16. PERCENTAGE OF DEATHS BY CAUSE AND AGE, WHITE OREGON RESIDENTS, 1986-1994

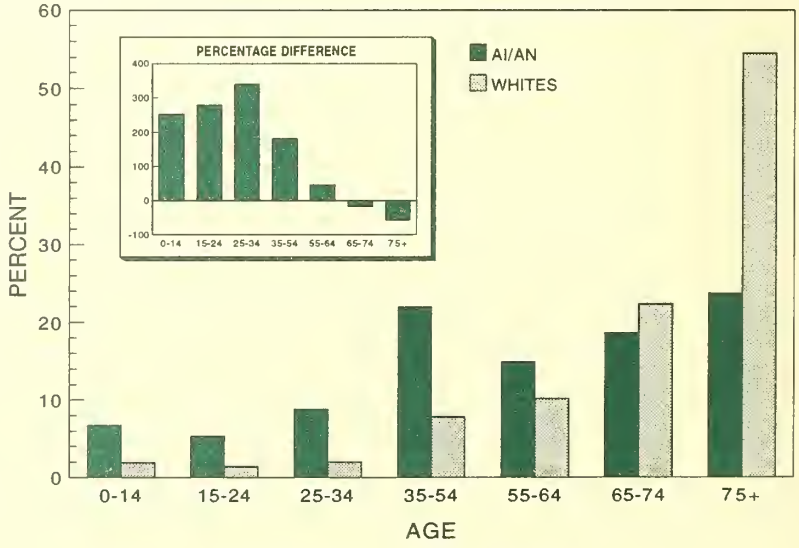


Ages 35 to 54. Middle-aged American Indians were 36 percent more likely to die than were their White counterparts. The death rates were 356.2 and 261.6. Unlike the other racial groups, heart disease was the leading cause of death instead of cancer. At 69.0, the American Indian heart disease death rate was 41 percent higher than the White rate (48.8). Ranking second were unintentional injuries; the American Indian rate (64.6) was twice as high as White rate (32.5). Alcoholism, the fourth leading cause in the previous age group ranked third. Middle-aged American Indians were 4.8 times more likely to succumb to alcoholism; their death rate was 61.2 compared to 12.8 for Whites. Figures 15 and 16 illustrate the increasing proportion of deaths due to alcoholism among middle-aged American Indians. Ranking fourth was cancer with a rate 38 percent less than for Whites, 47.9 compared to 77.2. Homicide ranked fifth and claimed American Indians proportionately 3.9 times more often than Whites. The rates were 20.0 and 5.1, respectively.

An Indian 55-64 years old was about as likely to die as was a White of the same age.

Ages 55 to 64. Among American Indians surviving their youth and middle age, the risk of dying in a given year declined to levels equal to or less than those for Whites. Ages 55-64 mark this transition. The death rates for American Indians and Whites were nearly identical, 1,103.5 compared to 1,099.9. Heart disease was the number one killer of American Indians aged 55-64, unlike all other racial groups where cancer was the leading cause of death. The heart disease

FIGURE 17. PERCENTAGE OF DEATHS BY AGE FOR AMERICAN INDIANS AND WHITES, OREGON RESIDENTS, 1986-1994



death rate for American Indians was almost 11 percent higher than the White rate, 334.1 compared to 301.9. Ranking second was cancer at 329.0, 23 percent below the White rate of 429.2. Alcoholism, the third leading cause of death among American Indians, was 2.4 times more likely to claim American Indians; the death rates were 91.1 versus 38.6 for Whites. Diabetes appears for the first time as an important cause of death among American Indians, ranking fourth with a rate of 70.9; this was 2.6 times higher than the White rate of 26.8. Unintentional injuries ranked fifth; with a rate of 40.5, American Indians were 23 percent more likely to die from this cause as were Whites (33.0).

Among 65- to 74-year-olds, American Indians were less likely to die than were Whites.

Ages 65 to 74. An American Indian in this age group was 13 percent less likely to die than was a White; the death rates were 2,188.3 and 2,510.0. Among older Oregonians, a greater degree of similarity is found in the leading causes of death. Cancer, heart disease, and chronic obstructive pulmonary disease (COPD) were the three leading causes for both American Indians and Whites. However, the death rates were substantially lower for American Indians. The following rates were recorded: cancer, 637.9 for American Indians, 865.1 for Whites; heart disease, 613.7 and 734.6; COPD, 153.4 and 199.2. Ranking fourth among American Indians, diabetes claimed proportionately 2.4 times as many American Indians as Whites; the rates were 137.3 and 58.1. Alcoholism continued to be an important cause of death among American Indians; the rate was 2.6 times higher compared to Whites (96.9 versus 37.9).

Ages 75+. Elderly American Indians at least 75 years old had a death rate 30 percent lower than Whites, 5,720.9 compared to 8,204.4. Moreover, the American Indian death rates for the four leading causes ranged between 18 to 55 percent lower than those for Whites. The death rates were: heart disease, 1,984.1 for American Indians, 2,877.4 for Whites; cancer, 1,124.3 and 1,458.9; cerebrovascular disease, 429.9 and 945.2; pneumonia and influenza, 347.2 and 421.9. However, the rate for diabetes, the fifth leading cause among American Indians, was 1.7 times the White rate, 248.0 compared to 147.3. Among the majority population, over one-half of all deaths occurred to persons 75 or older but among American Indians fewer than one-fourth of the deaths occurred in the elderly (Figure 17).

Median Age at Death. One-half of all American Indians died by age 60. By comparison the median age for Whites was 76 (Table 5). The difference was greatest for American Indian males whose median age at death was 55, far short of the 73 for White males. For females the ages were 66 and 79, respectively. The greatest difference by cause was in the median age for suicide; for Whites, the age was 43 but for American Indians it was 27.

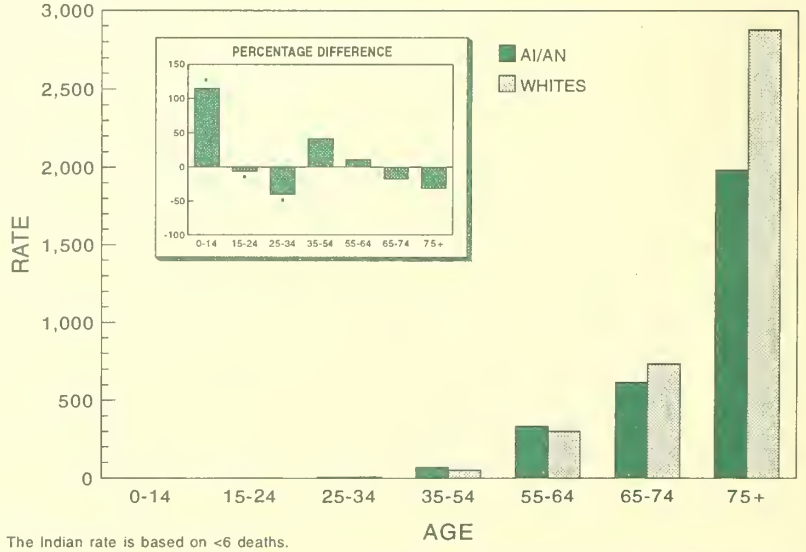
The age-adjusted death rates for American Indians were elevated for alcoholic diseases, unintentional injuries, and homicide.

CAUSES OF DEATH

Of the six leading causes of death among American Indians, three were directly due to external causes: unintentional injuries, alcoholic diseases, and homicide. Unlike African Americans, however, these were the only three causes with age-adjusted death rates higher than for Whites. In fact, an Indian's risk of death from heart disease, cancer, or cerebrovascular disease was significantly less than that of Whites. Table 3 lists the leading causes of death for American Indians.

Heart Disease. As with Whites, more American Indians died from heart disease than any other cause. Although the age-adjusted death rate for American Indians was 20 percent lower than for Whites (212.0 compared to 265.5), the years of potential life lost index was significantly higher, 1.31. This means that although American Indians were less likely to die from heart disease, they were more likely to die

FIGURE 18. AGE-SPECIFIC HEART DISEASE DEATH RATES FOR AMERICAN INDIANS AND WHITES, OREGON RESIDENTS, 1986-1994



* The Indian rate is based on <6 deaths.

prematurely, losing proportionately 31 percent more years of life than Whites. Most of these lost years resulted from the elevated risk of death among 35-54 year old American Indians; the death rate was 41 percent higher for American Indians in this age group compared to Whites. As with most causes of death, the highest rates occurred among the elderly (Figure 18).

Athough American Indians were less likely than Whites to die from heart disease, they were more likely to die prematurely.

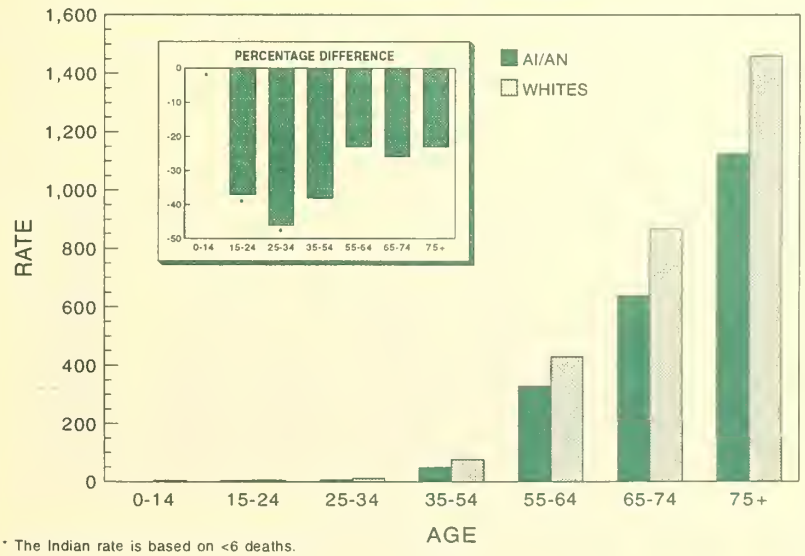
Among the risk factors for heart disease, obesity is known to be more prevalent among American Indians but hypertension less so (although this, and other risk factors, may vary by tribe).[18] Cholesterol levels have been reported to be similar to or lower than the levels for Whites.[18]

Cancer. American Indians were 26 percent less likely to die from malignant neoplasms than Whites, a significant difference. The age-adjusted death rates were 157.6 and 213.2. In fact, the age-specific death rates were lower in every age category for American Indians (Figure 19). Consequently, the years of potential life lost index was also significantly low (0.58), nearly as low as for the Chinese and Japanese (0.56). The death rate was the lowest for any racial group.

Compared to Whites, the age-specific cancer death rates for American Indians were lower in every age category.

Lung cancer was the most common fatal cancer in Oregon but American Indians were 13 percent less likely to die from this disease than were Whites; the death rates were 55.0 for American Indians compared to 63.4 for Whites. The years of potential life lost index was also lower, 0.76. Neither of these differences were statistically significant, however.

FIGURE 19. AGE-SPECIFIC CANCER DEATH RATES FOR AMERICAN INDIANS AND WHITES, OREGON RESIDENTS, 1986-1994



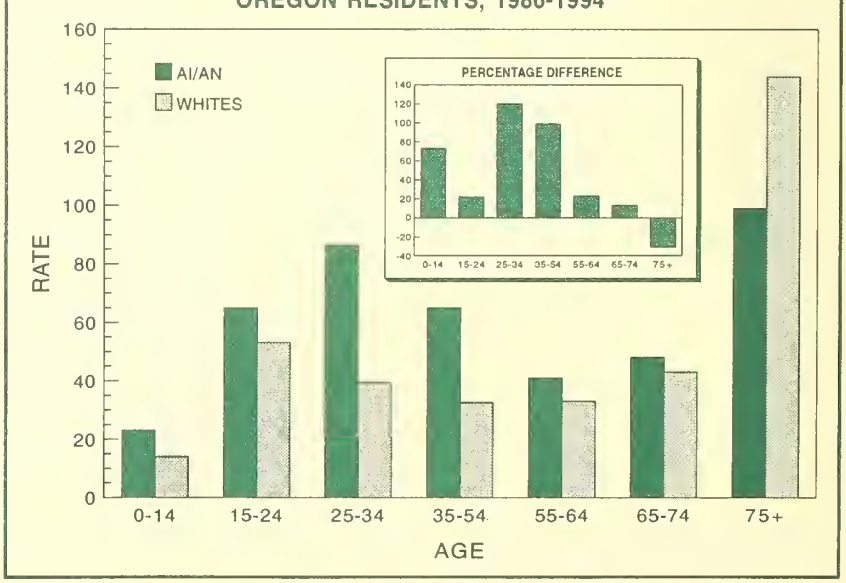
Although American Indians have a low cancer rate, a diagnosis of cancer more often ends in death for this group.[18] A Washington state study found that under-reporting of the American Indian race occurred disproportionately more often when the death was due to cancer.[3] If this occurs in Oregon as well, the death rates reported here may be artificially low.

The unintentional injury death rate for American Indians was 46 percent higher than for Whites.

Unintentional Injuries. No other racial group was more likely to die from unintentional injuries than were American Indians. Their age-adjusted death rate (57.9) was 46 percent higher than the White rate (39.6), a significant difference. Not only were they more apt to die from this cause, they were far more likely to die prematurely, losing proportionately 67 percent more years of potential life than Whites. The greatest disparity in age-specific death rates was among 25- to 34-year-olds; American Indians were more than twice as likely to die from unintentional injuries (Figure 20). Almost half of all American Indians aged 25-34 died from this cause.

More than half (54 percent) of all American Indian unintentional injury deaths resulted from motor vehicle crashes; among Whites, 49 percent were due to crashes. The difference between the American Indian and White motor vehicle accident death rates was even sharper, 30.4 versus 19.7. Not only was the death rate 55 percent higher, a significant difference, the years of potential life lost index was also

FIGURE 20. AGE-SPECIFIC UNINTENTIONAL INJURY DEATH RATES FOR AMERICAN INDIANS AND WHITES, OREGON RESIDENTS, 1986-1994



significantly higher, 1.41. Most deaths (53 percent) occurred between ages 15 and 34 but the largest difference compared to Whites was among 35- to 54-year-olds (Figure 21).

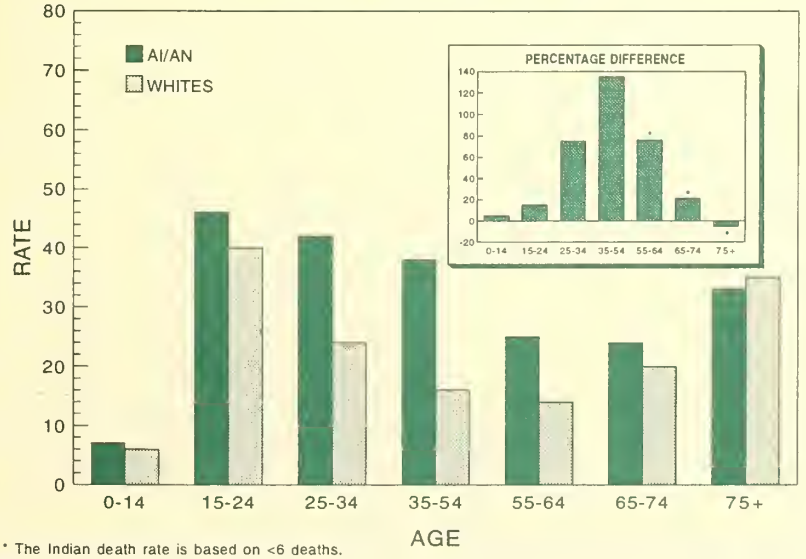
Many of the deaths due to motor vehicle crashes were likely alcohol-related. Nationally, 69 percent of American Indian drivers who died in motor vehicle crashes had been drinking prior to their death, compared to 46 percent of Whites.[41] The alcohol-related motor vehicle crash death rate was four times higher for American Indians than for all races.[42] The more frequent alcohol consumption combined with the greater likelihood of an injury occurring in a rural area (where medical care is less likely to be readily available) contribute to the elevated death rates for American Indians.

Fires are also an important cause of unintentional injury among American Indians. In a Washington state study, a high prevalence of modifiable risk factors was found in their households.[43] These included cigarette and alcohol use, smoking in bed, and the use of wood stoves. American Indians have the highest smoking prevalence of the racial groups included in the Behavioral Risk Factor Surveillance System.[44]

A recent study of risk-taking behavior by American Indians living on western U.S. reservations found that factors specific to tribe and region may be more important than income and education in determining lifestyle practices.[45]

Alcoholism. One in 15 American Indians died from the natural effects of alcohol, compared to one in 79 Whites.

FIGURE 21. AGE-SPECIFIC MOTOR VEHICLE-RELATED DEATH RATES FOR AMERICAN INDIANS AND WHITES, OREGON RESIDENTS, 1986-1994



* The Indian death rate is based on <6 deaths.

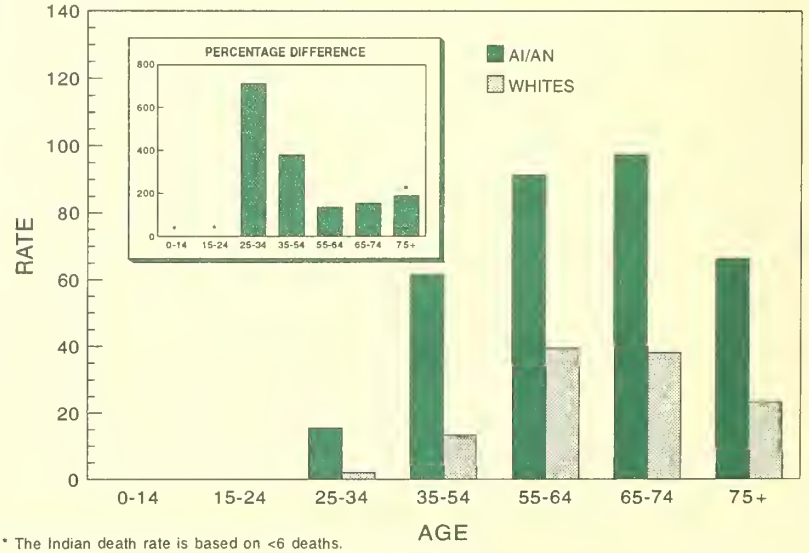
American Indians lost proportionately five times as many years of potential life from alcoholism than did Whites.

Alcoholism was the fourth leading cause of death among American Indians, with an age-adjusted death rate of 38.1. This was 3.4 times higher than the White rate of 11.3. By age, the greatest disparity was recorded among 25- to 34-year-olds; American Indians were 8.1 times more likely to die from alcohol abuse (Figure 22). In older age groups, the American Indian death rates were 2.4 to 4.8 times higher than those for Whites. Alcoholism clearly produced the greatest risk differential by cause in terms of premature mortality; the years of potential life lost index was 4.92. As with unintentional injuries, both this measure of mortality and the age-adjusted death rate were statistically significantly higher than for the majority population.

Alcohol use varies from tribe to tribe; in some, alcohol use is less prevalent than among the White population.[18] The effects of loss of land, poverty, forced abandonment of traditional ways of life and language, inadequate schooling, disruption of family life, and a harsh physical environment (on reservations), are thought to have frustrated many American Indians in their attempts to lead healthy lifestyles. Each of these elements is associated with concomitant alcohol abuse.[18] And alcohol use is clearly associated with the two other causes of death (unintentional injuries and homicide) with significantly elevated death rates.

Cerebrovascular Disease. This, the fifth leading cause of death among American Indians, posed less of a risk over-

FIGURE 22. AGE-SPECIFIC ALCOHOLISM DEATH RATES FOR AMERICAN INDIANS AND WHITES, OREGON RESIDENTS, 1986-1994



* The Indian death rate is based on <6 deaths.

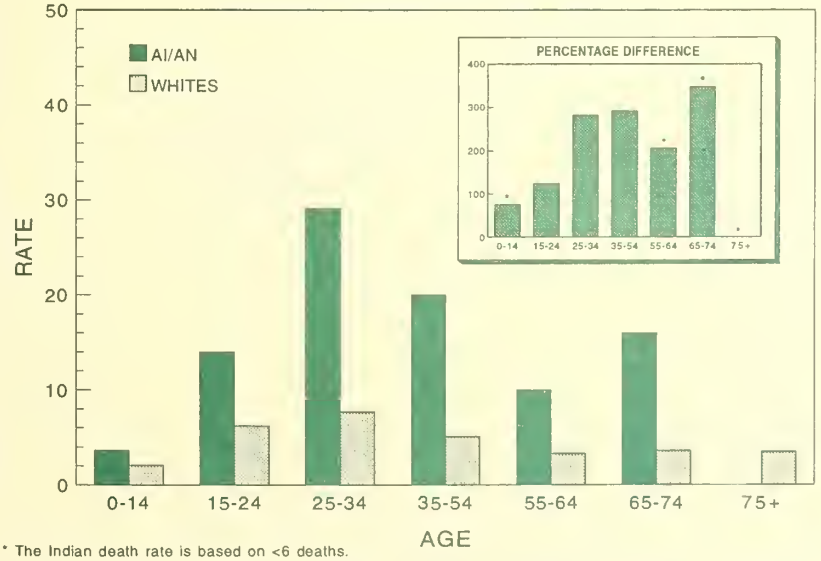
all but disproportionately claimed 25- to 54-year-olds. The age-adjusted death rate was only about half the White rate, 40.6 compared to 72.3. But at the same time the years of potential life lost index was 1.57. The former was statistically significantly different while the latter was not. The risk factors for cerebrovascular disease are similar to those reported for heart disease.

Homicide. American Indians were over three times more apt to be murdered than were Whites. Homicide was the sixth leading cause of death among American Indians, but seventeenth for Whites. The age-adjusted death rate for American Indians was 14.9 compared to 4.6 for Whites, a significant difference. Unlike African Americans where the homicide rate was highest among 15- to 24-year-olds, American Indians aged 25-34 were most likely to be murdered. No American Indians 75 or older were murdered but those in younger age categories were 1.8 to 4.5 times more likely to die at another's hand than were Whites (Figure 23). American Indians were more likely to die prematurely from this cause than Whites; at 2.86, the years of potential life lost index was significantly higher. Homicide and suicide were tied as the third leading cause of years of potential life lost following unintentional injuries and heart disease (Table 7).

An American Indian was over three times more likely than a White to be a homicide victim.

Many of the risk factors linked with inappropriate alcohol use are associated with an elevated incidence of homicide as well as unintentional injuries.[18]

FIGURE 23. AGE-SPECIFIC HOMICIDE DEATH RATES FOR AMERICAN INDIANS AND WHITES, OREGON RESIDENTS, 1986-1994



* The Indian death rate is based on <6 deaths.

Suicide. Overall, American Indians were 20 percent less likely to commit suicide than were Whites; the age-adjusted death rates were 13.3 and 16.5, respectively. But this masks the risk among young American Indians, and in particular to 15- to 24-year-olds; their death rate (27.8) was 57 percent higher than the White rate (17.7). The years of potential life lost index was 1.23, but neither this nor any of the other measures of suicide were statistically significantly different compared to those of the majority population. Nationally, American Indian suicide rates were higher where American Indians comprised a larger percentage of the population.[46]

◄ CHINESE AND JAPANESE ►

Oregonians of Chinese and Japanese ancestry had the most favorable mortality profile. (The reasons for aggregating these two races are explained on page 8.) Their age-adjusted death rate (680.4) was 23 percent lower than for Whites (887.8) while their years of potential life lost index was 0.39. Both were significantly low and the lowest in the state. (These findings cannot be generalized to other Asian groups.)

Four of the five leading causes of death for the Chinese and Japanese were the same as for Whites but the rank order was different. Unlike other races, cancer, not heart disease, was the leading cause of death. Heart disease ranked second followed by cerebrovascular disease and unintentional injuries. Ranking fifth for the Chinese and Japanese, but seventh for Whites, was diabetes.

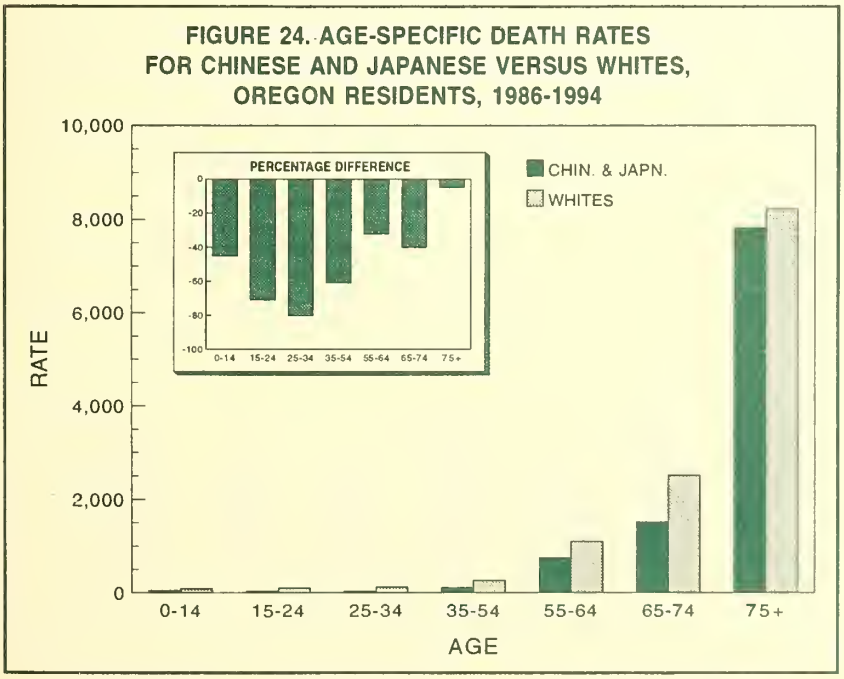
CAUSES OF DEATH FOR CHINESE AND JAPANESE, 1986-1994

All Causes		875
1	Cancer	245
2	Heart Disease	234
3	Cerebrovascular Disease	74
4	Unintentional Injuries	38
5	Diabetes	32
6	Pneumonia & Influenza	28
7	COPD	22
8	Suicide	13
9	Arteriosclerosis	12
9	Other Artery Disease	12
11	Hypertension	10
12	Homicide	8
13	Alzheimer's Disease & Dementia	7
14	Parkinson's Disease	6
14	Nephritis & Nephrosis	6

CAUSATION BY AGE

At no age was the death rate for Chinese and Japanese Oregonians higher than the rate for Whites (Figure 24). And with one exception, their age-specific rates were the lowest for any race. This mortality differential was greatest among younger residents; in fact, 25-34 year old Chinese and Japanese were only about one-fifth as likely to die as were Whites. Of the racial/ethnic groups discussed in this report, the

FIGURE 24. AGE-SPECIFIC DEATH RATES FOR CHINESE AND JAPANESE VERSUS WHITES, OREGON RESIDENTS, 1986-1994



Chinese and Japanese had median ages at death closest to the state figures. In fact, the age (73) for Chinese and Japanese males was identical to the value for Whites males. For females, the median ages were 75 and 79, respectively. For both sexes combined, the Chinese and Japanese median age at death was 74 compared to 76 for Whites.

Chinese and Japanese Oregonians had the most favorable mortality profile.

CAUSES OF DEATH

Only heart disease, cancer, and cerebrovascular disease accounted for more than 50 deaths among the Chinese and Japanese. For each of these causes, the age-adjusted death rates were lower than for those of Whites. The age-adjusted death rates and years of potential life lost indices were significantly lower for both heart disease and cancer. Chinese and Japanese Oregonians were also notable in having an alcoholism crude death rate that was less than one-tenth the White rate, 0.8 compared to 11.5.

Differences in economic status, culture, and lifestyle are thought to account for the lower mortality experienced by the Chinese and Japanese. The low death rates for causes associated with risky behaviors, such as smoking and excess alcohol consumption, have been cited in support of this hypothesis.[18] Chinese drivers killed in motor vehicle crashes were the least likely of the races to have been drinking prior to their crash; only 7 percent had a blood alcohol content of 0.01 or greater. For the Japanese the figure was 27 percent and for Whites 46 percent.[41] Japanese men are also known to have lower cholesterol levels than White men while those over 50 are less likely to be hypertensive than their White counterparts.[18] Japanese women in all age groups have been reported to have lower blood pressure levels than White women.[18]

◀ HISPANICS ▶

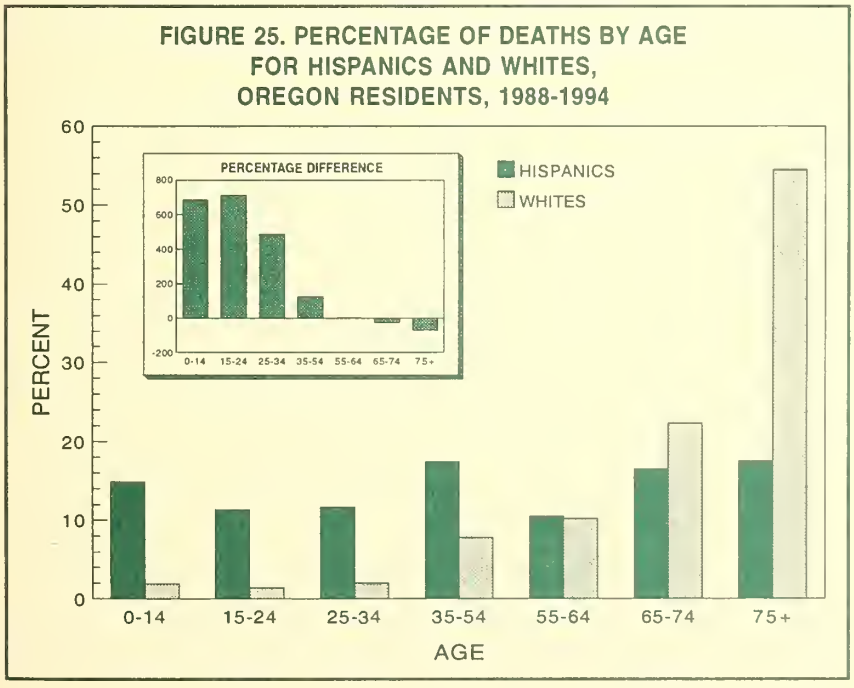
Because of changes in the method of collecting information regarding Hispanic decedents during the study period, reliable death rates could not be calculated for this group. At the same time, the 1990 census undercounted Hispanics; the undercount is thought to be especially pronounced for younger males. The number of Hispanics in Oregon is believed to be growing rapidly, as well, making death rate calculations problematic. However, other useful measures of mortality (including the number of deaths by age group, median age at death, and years of potential life lost) could be computed and are shown for the period 1988-1994 in Tables 5, 9, and 10.

The median age at death by cause and the leading causes by age suggest that the mortality profile of Hispanics may not be unlike that for American Indians. However, unlike any other group, Hispanics died more often from unintentional injures than any other cause. Heart disease and cancer were tied at second followed by cerebrovascular disease (e.g., stroke, cerebral hemorrage). Like African Americans, homicide was the fifth leading cause of death. These very different rankings likely reflect, at least in part, the young age distribution of Oregon Hispanics relative to non-Hispanics.

CAUSES OF DEATH FOR HISPANICS, 1988-1994

All Causes		1,794
1	Unintentional Injuries	372
2	Heart Disease	262
2	Cancer	262
4	Cerebrovascular Disease	95
5	Homicide	88
6	Perinatal Conditions	84
7	Diabetes	68
8	Suicide	59
9	Alcoholism	56
10	Congenital Anomalies	55
11	AIDS	47
12	SIDS	40
13	Pneumonia & Influenza	31
14	COPD	24
15	Injuries Undetermined Whether Intentionally or Unintentionally Inflicted	19

FIGURE 25. PERCENTAGE OF DEATHS BY AGE FOR HISPANICS AND WHITES, OREGON RESIDENTS, 1988-1994



CAUSATION BY AGE

As with African Americans and American Indians, unintentional injuries and homicide accounted for a far greater proportion of Hispanic deaths.

The leading causes of death for Hispanic children under age 15 were nearly identical to those for Whites.[47] Among 15- to 24-year-olds, homicide ranked second compared to third for Whites. It was also the second leading cause among Hispanic 25- to 34-year-olds but fifth for Whites. Among 35- to 54-year-olds both unintentional injuries and alcoholism posed a greater risk of death to Hispanics. These causes ranked first and third, respectively, for Hispanics but third and sixth for Whites. Among Hispanics aged 55-64 and 65-74, diabetes ranked third, the highest ranking for any racial/ethnic group. Diabetes also ranked fourth among Hispanics 75 or older but eighth for Whites.

The median age at death for Hispanic Oregonians was far lower than for all others. However, this may reflect the young age distribution of this population, particularly for males. There was a strong gender dichotomy within the minority; the median age for males was 39 but 64 for females. By cause, the Hispanic median ages at death most closely resembled those for African Americans and American Indians (Table 5).

CAUSES OF DEATH

Injuries. Thirty percent of all Hispanic deaths resulted from injuries. Two-thirds of these were from unintentional injuries, making them the leading cause of death. Hispanics were proportionately 4.8 times as likely to die from unintentional injuries (based on the percentage distribution). Nationally, even after controlling for the relative youth of the Hispanic population, Hispanics have been found to be more likely to die from unintentional injuries.[18] In Oregon, unintentional injuries accounted for a larger fraction of the total Hispanic deaths in all age groups except for children under 15 and adults 75 or older. Self-reports of drinking patterns suggests that Hispanics of both sexes are likely to engage in heavier drinking. Consequently, they are more likely to suffer from alcohol-related problems including alcohol-related injuries.[18] Homicide was the second most common injury death in Hispanics. Among 15- to 64-year-olds, homicide accounted for proportionately five times as many deaths of Hispanics as it did for Whites. Nationally, assaultive injury has been found to account for many of the excess deaths among Hispanics.[48]

Natural Causes. Hispanics were as likely to die from heart disease as from cancer. However, these causes accounted for proportionately fewer deaths in nearly all age groups of Hispanics. Cerebrovascular disease, the fourth leading cause of death among Hispanics, was a somewhat more common cause of death for most middle-aged and older Hispanics. In a 15 state study, age-adjusted death rates for heart disease, cancer, and cerebrovascular disease were found to be significantly lower for Hispanics than non-Hispanic Whites. However, the diabetes and liver cirrhosis rates were significantly higher.[49]

Some contributing factors were noted in other studies. Mexican Americans more often report sometimes not having enough food.[50] A higher proportion of heavy drinking has been reported among Hispanic men than among non-Hispanic men.[51]

Although certain causes of death are apparently more common among Hispanics, the overall health status of this group is better than expected on the basis of economic status alone.[52] Cultural practices, family support, selective migration, diet, and genetic heritage have been offered as an explanation for this apparent paradox. Recent immigrants have the lowest death rates for many causes but with acculturation and adoption of the health-related behaviors of the majority population death rates often rise.[18]

CONCLUSIONS

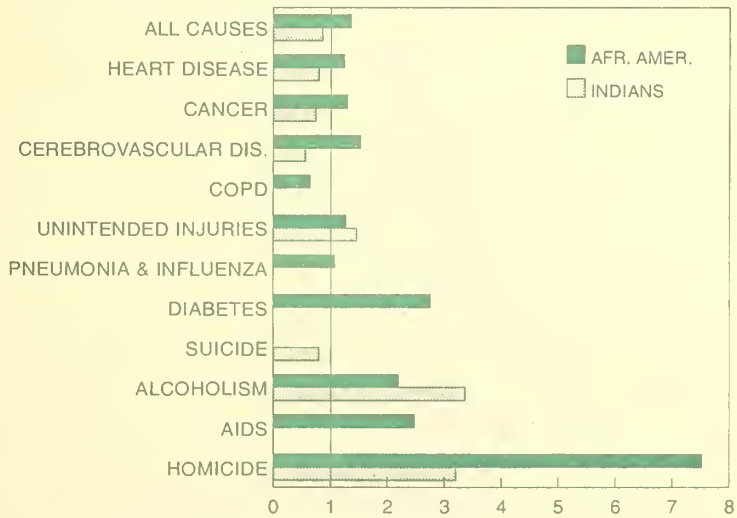
African Americans and American Indians, the two groups with the poorest mortality profiles, share certain historical experiences: generations have been subjected to violence and discrimination by the majority population. They have lived in poverty, often had fewer years of education, and been forced to abandon their traditional ways of life and language. The consequences are mirrored in their health.

The measures of mortality clearly show that African American Oregonians had the least favorable health profile. Their age-adjusted death rates and years of potential life lost indices were significantly higher for nearly all chronic diseases as well as for unintentional injuries and homicides (Figures 26-27). The homicide rate is particularly striking; it was 7.5 times higher than for Whites.

American Indians, too, were at a greater risk of premature death although their overall age-adjusted death rate was lower than for Whites. Unlike African Americans, their age-adjusted death rates were significantly elevated for only three causes: alcoholism, homicide, and unintentional injuries. However, when death occurred it was significantly more likely to occur prematurely for nearly every cause.

Data limitations make definitive conclusions about Hispanics difficult, but they may be facing special risks from unintentional injuries, homicides, alcoholism, and diabetes.

FIGURE 26. COMPARATIVE MORTALITY FIGURES BY RACE AND CAUSE, OREGON RESIDENTS, 1986-1994



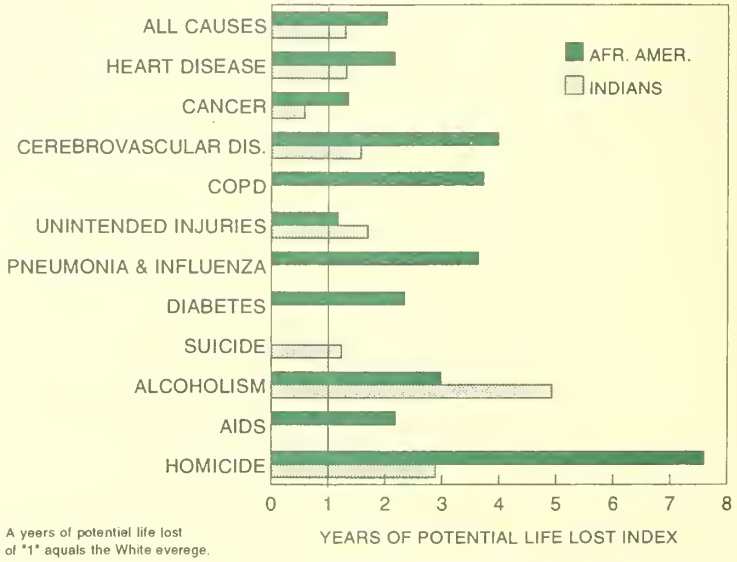
Note: A comparative mortality figure of "1" equals the White average.

Oregonians of Chinese and Japanese ancestry had the most favorable mortality profile; both the age-adjusted death rate and years of potential life lost index were the lowest recorded for any race.

Race and ethnicity *per se* are rarely determinants of the health of a population. Rather, they should be seen as a surrogate indicator of a complex interplay of cultural, biological, social, and economic factors. For example, nationally, African Americans report fewer beneficial health behaviors: 46 percent of African American men compared to 36 percent of White men, and 49 percent of African American women compared to 31 percent of White women have three or fewer good health habits.[22] At the same time, African Americans are nearly twice as likely as Whites to report being in only fair or poor health, but much of this difference is tied to income level; access to health care services is hampered by low income and lack of health insurance.[22]

Every leading cause of death for Oregon's minorities had preventable risk factors. Among the most salient are smoking, diet, patterns of exercise, alcohol abuse, and stress. It is believed that the number of excess deaths among minority groups can be substantially reduced through increased availability and use of preventive services, culturally appropriate community health education about lifestyle issues, and adherence to medical regimens.[18] Plainly more challenging, however, is improving household income, an often important predictor of morbidity and mortality.

FIGURE 27. YEARS OF POTENTIAL LIFE LOST INDICES BY RACE AND CAUSE, OREGON RESIDENTS, 1986-1994



Note: A yeers of potentiel life lost index of "1" aquals the White everege.

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TABLES

TABLE 1.
CATEGORIES, INTERNATIONAL CLASSIFICATION OF DISEASE CODES, AND EXAMPLES FOR AGE-ADJUSTED CAUSES OF MORTALITY DISCUSSED IN THIS REPORT.

CATEGORY	ICD 9 CODES	EXAMPLES
Heart Disease	390-398, 402, 404.0-425.4, 425.6-429.9	Rheumatic Fever, Myocardial Infarction, Arteriosclerotic Heart Disease, Aortic Stenosis
Cancer	140-208	Glioblastoma, Leukemia, Lymphoma, Hodgkin's Disease
Lung Cancer	*162.2-162.9*	*Bronchogenic Cancer*
Cerebrovascular Disease	430-438	Stroke, Cerebral Hemorrhage and Embolism
Chronic Obstructive Pulmonary Disease	490-496	Emphysema, Chronic Bronchitis, Asthma
Unintentional Injuries	800-949	Poisoning, Falls, Asphyxiation, Motor Vehicle Accidents
Motor Vehicle Crash	*810-825*	*Head-on collision, Pedestrian Struck by Vehicle*
Pneumonia and Influenza	480-487	Bronchopneumonia, Viral Pneumonia
Diabetes Mellitus	250	Diabetic Ketosis
Alzheimer's Disease and Dementia	290.1, 331.0	Alzheimer's Dementia
Suicide	950-959	Firearms, Poisoning
Alcoholism (Natural Effects of Alcohol)	291, 303, 425.5, 535.3, 571.0-571.3	Alcoholic Psychosis, Cardiomyopathy, Gastritis, Cirrohosis of Liver, Dependence Syndrome
Acquired Immune Defiency Syndrome	042-044	AIDS
Homicide	960-979	Firearms, Suffocation, Cutting, Piercing
Drug-Caused	292, 304, 305.0, 305.2-305.9, 850-859, 950.0-950.5, 980.0-980.5	Drug Psychosis, Heroin Dependence, Amitriptyline Overdose

TABLE 2.
COMPARATIVE MORTALITY FIGURES (CMF) AND YEARS OF POTENTIAL LIFE LOST INDICES (YPLLI) BY CAUSE AND RACE, OREGON RESIDENTS, 1986-1994.

CAUSE	AFRICAN AMERICAN		AMERICAN INDIAN		CHINESE & JAPANESE	
	CMF	YPLLI	CMF	YPLLI	CMF	YPLLI
All Causes	*1.36	*2.03	*0.86	*1.30	*0.77	*0.39
Heart Disease	*1.24	*2.17	*0.80	*1.31	*0.76	*0.29
Cancer	*1.30	*1.34	*0.74	*0.58	*0.76	*0.57
Lung Cancer	*1.32	*1.40	0.86	0.76	-	-
Cerebrovascular Disease	*1.53	*3.98	*0.56	1.57	0.84	1.04
COPD†	*0.64	*3.73	-	-	-	-
Unintentional Injuries	*1.27	1.17	*1.46	*1.67	-	-
Motor Vehicles	0.90	*0.68	*1.55	*1.41	-	-
Pneumonia & Influenza	1.08	*3.63	-	-	-	-
Diabetes	*2.76	*2.34	-	-	-	-
Suicide	-	-	0.80	1.23	-	-
Alcoholism	*2.20	*2.98	*3.37	*4.92	-	-
AIDS	*2.48	*2.18	-	-	-	-
Homicide	*7.52	*7.60	*3.21	*2.86	-	-

* Indicates a value that is statistically significantly different compared to that for Whites. Note that because Whites are the referent group, their CMF and YPLLI values are, by definition, 1.00. See Page 6 for a discussion of how these values are calculated.
- CMF and YPLLI were not calculated for race-cause combinations totaling fewer than 50 events.
†Chronic Obstructive Pulmonary Disease.

TABLE 3.
LEADING CAUSES OF DEATH BY RACE, OREGON RESIDENTS, 1986-1994.

CAUSE	CRUDE RATE*	NUMBER	CAUSE	CRUDE RATE*	NUMBER
WHITE			**AFRICAN AMERICAN**		
1. Heart Disease	274.4	66,304	**1.** Heart Disease	172.0	728
2. Cancer	219.4	53,007	**2.** Cancer	154.1	652
3. Cerebrovascular Disease	74.9	18,093	**3.** Cerebrovascular Disease	57.0	241
4. Chronic Obstructive Pulmonary Disease	48.1	11,629	**4.** Unintentional Injuries	43.5	184
5. Unintentional Injuries	39.9	9,636	**5.** Homicide	35.7	151
6. Pneumonia & Influenza	31.6	7,632	**6.** Diabetes	25.1	106
7. Diabetes	17.8	4,303	**7.** Pneumonia & Influenza	18.2	77
8. Suicide	16.6	4,019	**8.** Perinatal Conditions	17.7	75
9. Alzheimer's Disease	15.4	3,710	**9.** Chronic Obstructive Pulmonary Disease	17.5	74
10. Arteriosclerosis	13.0	3,130	**10.** Alcoholism	17.3	73
11. Other Artery Disease	12.0	2,895	**11.** AIDS	13.9	59
12. Alcoholism	11.5	2,784	**12.** SIDS	12.5	53
13. AIDS	6.4	1,545	**13.** Suicide	10.6	45
14. Hypertension	5.2	1,259	**14.** Hypertension	9.7	41
15. Parkinson's Disease	5.2	1,251	**15.** Other Artery Disease	8.7	37
16. Congenital Anomalies	4.9	1,172	**16.** Congenital Anomalies	7.6	32
17. Homicide	4.6	1,116	**17.** Nephritis & Nephrosis	6.6	28
18. Nephritis & Nephrosis	4.4	1,069	**18.** Undetermined Injuries **	5.9	25
19. Perinatal Conditions	4.0	970	**19.** Arteriosclerosis	5.7	24
20. Septicemia	3.4	812	**20.** Septicemia	5.2	22

* Rate per 100,000 population.
** Injuries undetermined whether intentionally or unintentionally inflicted.

TABLE 3.
LEADING CAUSES OF DEATH BY RACE, OREGON RESIDENTS, 1986-1994.

CAUSE	CRUDE RATE*	NUMBER	CAUSE	CRUDE RATE*	NUMBER
AMERICAN INDIAN			**CHINESE AND JAPANESE**		
1. Heart Disease	90.5	330	**1.** Cancer	105.8	245
2. Cancer	71.6	261	**2.** Heart Disease	101.0	234
3. Unintentional Injuries	55.1	201	**3.** Cerebrovascular Disease	32.0	74
4. Alcoholism	27.1	99	**4.** Unintentional Injuries	16.4	38
5. Cerebrovascular Disease	16.5	60	**5.** Diabetes	13.8	32
6. Homicide	14.8	54	**6.** Pneumonia & Influenza	12.1	28
7. Suicide	13.7	50	**7.** Chronic Obstructive Pulmonary Disease	9.5	22
8. Diabetes	13.4	49	**8.** Suicide	5.6	13
9. Chronic Obstructive Pulmonary Disease	11.5	42	**9.** Arteriosclerosis	5.2	12
10. Pneumonia & Influenza	11.2	41	**9.** Other Artery Disease	5.2	12
11. SIDS	6.6	24	**11.** Hypertension	4.3	10
12. Perinatal Conditions	4.1	15	**12.** Homicide	3.5	8
13. AIDS	3.8	14	**13.** Alzheimer's Disease & Dementia	3.0	7
14. Arteriosclerosis	3.6	13	**14.** Parkinson's Disease	2.6	6
14. Congenital Anomalies	3.6	13	**14.** Nephritis & Nephrosis	2.6	6
16. Hypertension	2.2	8	**16.** Congenital Anomalies	1.7	4
16. Nephritis & Nephrosis	2.2	8	**17.** Septicemia	1.3	3
18. Other Artery Disease	1.6	6	**17.** Gastrointestinal Ulcers	1.3	3
18. Gastrointestinal Ulcers	1.6	6	**17.** SIDS	1.3	3
18. Undetermined Injuries **	1.6	6	**17.** AIDS	1.3	3

* Rate per 100,000 population.
** Injuries undetermined whether intentionally or unintentionally inflicted.

TABLE 4.
LEADING CAUSES OF DEATH BY AGE AND RACE, OREGON RESIDENTS, 1986-1994.

WHITE				AFRICAN AMERICAN			
0-14 YEARS							
	#	%	RATE		#	%	RATE
TOTAL	4,093	100.0	79.6	TOTAL	215	100.0	168.3
Perinatal Conditions	967	23.6	18.8	Perinatal Conditions	75	34.9	58.7
SIDS	763	18.6	14.8	SIDS	53	24.7	41.5
Congenital Anomalies	751	18.3	14.6	Unintentional Injuries	28	13.0	21.9
Unintentional Injuries	696	17.0	13.5	Congenital Anomalies	24	11.2	18.8
Cancer	177	4.3	3.4	Homicide	8	3.7	6.3
15-24 YEARS							
	#	%	RATE		#	%	RATE
TOTAL	3,040	100.0	96.4	TOTAL	116	100.0	155.7
Unintentional Injuries	1,677	55.2	53.2	Homicide	54	46.6	72.5
Suicide	557	18.3	17.7	Unintentional Injuries	27	23.3	36.2
Homicide	196	6.4	6.2	Suicide	15	12.9	20.1
Cancer	156	5.1	4.9	Heart Disease	3	2.6	4.0
Undetermined Injuries*	62	2.0	2.0	Cerebrovascular Dis.	3	2.6	4.0
25-34 YEARS							
	#	%	RATE		#	%	RATE
TOTAL	4,438	100.0	116.7	TOTAL	168	100.0	219.7
Unintentional Injuries	1,494	33.7	39.3	Homicide	44	26.6	57.5
Suicide	720	16.2	18.9	Unintentional Injuries	29	17.3	37.9
AIDS	484	10.9	12.7	AIDS	18	10.7	23.5
Cancer	439	9.9	11.5	Cancer	13	7.7	17.0
Homicide	291	6.6	7.7	Heart Disease	11	6.5	14.4
35-54 YEARS							
	#	%	RATE		#	%	RATE
TOTAL	17,224	100.0	261.6	TOTAL	582	100.0	621.0
Cancer	5,082	29.5	77.2	Cancer	105	18.0	112.0
Heart Disease	3,210	18.6	48.8	Heart Disease	103	17.7	109.9
Unintentional Injuries	2,139	12.4	32.5	Unintentional Injuries	65	11.2	69.4
Suicide	1,285	7.5	19.5	Alcoholism	37	6.4	39.5
AIDS	904	5.2	13.7	AIDS	36	6.2	38.4
55-64 YEARS							
	#	%	RATE		#	%	RATE
TOTAL	22,520	100.0	1,099.9	TOTAL	419	100.0	1,881.0
Cancer	8,787	39.4	429.2	Cancer	150	35.8	673.4
Heart Disease	6,181	27.4	301.9	Heart Disease	105	25.1	471.4
COPD**	1,274	5.7	62.2	Cerebrovascular Dis.	22	5.3	98.8
Cerebrovascular Dis.	846	3.8	41.3	Alcoholism	18	4.3	80.8
Alcoholism	791	3.5	38.6	Diabetes	15	3.6	67.3
65-74 YEARS							
	#	%	RATE		#	%	RATE
TOTAL	49,270	100.0	2,510.0	TOTAL	649	100.0	3,623.7
Cancer	16,982	34.5	865.1	Cancer	200	30.8	1,116.7
Heart Disease	14,419	29.3	734.6	Heart Disease	193	29.7	1,077.6
COPD**	3,911	7.9	199.2	Cerebrovascular Dis.	67	10.3	374.1
Cerebrovascular Dis.	2,827	5.7	144.0	Diabetes	32	4.9	178.7
Diabetes	1,141	2.3	58.1	COPD**	19	2.9	106.1
75+ YEARS							
	#	%	RATE		#	%	RATE
TOTAL	120,257	100.0	8,204.4	TOTAL	917	100.0	8,686.2
Heart Disease	42,176	35.1	2,877.4	Heart Disease	309	33.7	2,927.0
Cancer	21,384	17.8	1,458.9	Cancer	179	19.5	1,695.6
Cerebrovascular Dis.	13,854	11.5	945.2	Cerebrovascular Dis.	113	12.3	1,070.4
Pneumonia & Influenza	6,184	5.1	421.9	Diabetes	42	4.9	397.8
COPD**	6,135	5.1	418.6	Pneumonia & Influenza	32	3.5	303.1

Rates Per 100,000 Population.

* Injuries undetermined whether purposely or unintentionally inflicted.

** Chronic obstructive pulmonary disease.

TABLE 4.
LEADING CAUSES OF DEATH BY AGE AND RACE, OREGON RESIDENTS, 1986-1994.

AMERICAN INDIAN				CHINESE AND JAPANESE			
0-14 YEARS							
	#	%	RATE		#	%	RATE
TOTAL	98	100.0	91.6	TOTAL	18	100.0	43.5
Unintentional Injuries	25	25.5	23.4	SIDS	3	16.7	7.3
SIDS	24	24.5	22.4	Homicide	3	16.7	7.3
Perinatal Conditions	15	15.3	14.0	Congenital Anomalies	2	11.1	4.8
Congenital Anomalies	11	11.2	10.3	Perinatal Conditions	2	11.1	4.8
Homicide	4	4.1	3.7	Suicide	1	5.6	2.4
15-24 YEARS							
	#	%	RATE		#	%	RATE
TOTAL	77	100.0	118.8	TOTAL	13	100.0	27.7
Unintentional Injuries	42	54.5	64.8	Unintentional Injuries	7	53.8	14.9
Suicide	18	23.4	27.8	Suicide	4	30.8	8.5
Homicide	9	11.7	13.9	Homicide	1	7.7	2.1
Cancer	2	2.6	3.1	Other	1	7.7	2.1
Pneumonia & Influenza	2	2.6	3.1				
25-34 YEARS							
	#	%	RATE		#	%	RATE
TOTAL	129	100.0	198.7	TOTAL	11	100.0	23.4
Unintentional Injuries	56	43.4	86.3	Homicide	3	27.3	6.4
Homicide	19	14.7	29.3	Suicide	2	18.2	4.3
Suicide	16	12.4	24.6	Unintentional Injuries	2	18.2	4.3
Alcoholism	10	7.8	15.4	Heart Disease	1	9.1	2.1
AIDS	7	5.4	10.8	Cancer	1	9.1	2.1
35-54 YEARS							
	#	%	RATE		#	%	RATE
TOTAL	320	100.0	356.2	TOTAL	59	100.0	102.2
Heart Disease	62	19.4	69.0	Cancer	30	50.8	52.0
Unintentional Injuries	58	18.1	64.6	Heart Disease	6	10.2	10.4
Alcoholism	55	17.2	61.2	Cerebrovascular Dis.	5	8.5	8.7
Cancer	43	13.4	47.9	Suicide	3	5.1	5.2
Homicide	18	5.6	20.0	Unintentional Injuries[1]	2	1.4	3.5
55-64 YEARS							
	#	%	RATE		#	%	RATE
TOTAL	218	100.0	1,103.5	TOTAL	142	100.0	743.2
Heart Disease	66	30.3	334.1	Cancer	67	47.2	350.7
Cancer	65	29.8	329.0	Heart Disease	28	19.7	146.5
Alcoholism	18	8.3	91.1	Cerebrovascular Dis.	14	9.9	73.3
Diabetes	14	6.4	70.9	Diabetes	5	3.5	26.2
Unintentional Injuries	8	3.7	40.5	COPD**	3	2.1	15.7
65-74 YEARS							
	#	%	RATE		#	%	RATE
TOTAL	271	100.0	2,188.3	TOTAL	213	100.0	1,510.3
Cancer	79	29.2	637.9	Cancer	78	36.6	553.1
Heart Diease	76	28.0	613.7	Heart Disease	54	25.4	382.9
COPD**	19	7.0	153.4	Cerebrovascular Dis.	14	6.6	99.3
Diabetes	17	6.3	137.3	Diabetes	10	4.7	70.9
Alcoholism	12	4.4	96.9	Unintentional Injuries	9	4.2	63.8
75+ YEARS							
	#	%	RATE		#	%	RATE
TOTAL	346	100.0	5,720.9	TOTAL	419	100.0	7,798.2
Heart Disease	120	34.7	1,984.1	Heart Disease	145	34.6	2,698.7
Cancer	68	19.7	1,124.3	Cancer	69	16.5	1,284.2
Cerebrovascular Dis.	26	7.5	429.9	Cerebrovascular Dis.	41	9.8	763.1
Pneumonia & Influenza	21	6.1	347.2	Pneumonia & Influenza	23	5.5	428.1
Diabetes	15	4.3	248.0	Diabetes	17	4.1	316.4

* Injuries undetermined whether purposely or unintentionally inflicted.
** Chronic obstructive pulmonary disease.

1. Also tied for fifth were deaths due to pneumonia and influenza and AIDS.

TABLE 5.
MEDIAN AGE AT DEATH BY SEX, CAUSE, AND RACE, OREGON RESIDENTS, 1986-1994.

SEX AND CAUSE	ALL RACES	WHITE	AFRICAN AMERICAN	AMERICAN INDIAN	CHINESE AND JAPANESE	HISPANIC*
TOTAL	76	76	65	60	74	47
Male	73	73	61	55	73	39
Female	79	79	69	66	75	64
Heart Disease	79	79	72	69	79	71
Cancer	72	72	67	67	67	66
Cerebrovascular Disease	82	82	74	73	76	74
COPD	75	75	65	71	74	72
Unintentional Injuries	41	41	36	30	71	26
Pneumonia & Influenza	84	84	72	76	87	71
Diabetes	74	75	65	68	75	65
Suicide	42	43	32	27	28	31
Alcoholism	61	61	53	49	-	48
AIDS	38	38	38	33	-	35
Homicide	32	33	27	32	-	26

- Age not calculated where fewer than ten events occured.

* Includes deaths occuring during 1988-1994.

TABLE 6.
AGE-ADJUSTED DEATH RATES AND PROPORTIONAL MORTALITY BY RACE, OREGON RESIDENTS, 1986-1994.

CAUSE	ALL RACES		WHITE		AFRICAN AMERICAN		AMERICAN INDIAN		CHINESE & JAPANESE	
	RATE	%	RATE	%	RATE	%	RATE	%	RATE	%
All Causes	889.0	100.0	887.8	100.0	1,209.3	100.0	761.9	100.0	680.7	100.0
Heart Disease	265.1	29.8	265.5	30.0	328.2	23.7	212.0	22.6	203.1	26.7
Cancer	212.6	23.9	213.2	24.0	276.8	21.3	157.6	17.9	162.1	28.0
Lung Cancer	*63.0*	*7.1*	*63.4*	*7.1*	*83.8*	*6.4*	*55.0*	*6.2*	-	*5.1*
Cerebrovascular Disease	72.5	8.2	72.3	8.2	110.9	7.9	40.6	4.1	60.8	8.5
COPD*	46.1	5.2	46.6	5.3	29.7	2.4	-	2.9	-	2.5
Unintentional Injuries	40.0	4.5	39.6	4.4	50.4	6.0	57.9	13.9	-	4.3
Motor Vehicle	*19.8*	*2.2*	*19.7*	*2.1*	*17.7*	*2.2*	*30.4*	*7.4*	-	*2.5*
Pneumonia & Influenza	30.5	3.4	30.5	3.5	33.0	2.5	-	2.8	-	3.2
Diabetes	17.6	2.0	17.3	1.9	47.7	3.5	-	3.4	-	3.7
Suicide	16.3	1.8	16.5	1.8	-	1.5	13.3	3.4	-	1.5
Alcoholism	11.6	1.3	11.3	1.3	24.8	2.4	38.1	6.8	-	0.2
AIDS	6.4	0.7	6.4	0.7	15.8	1.9	-	1.0	-	0.3
Homicide	5.4	0.6	4.6	0.5	34.8	4.9	14.9	3.7	-	0.9

Rates per 100,000 population.

Age-adjusted rates were not calculated for race-cause combinations totalling fewer than 50 events.

*Chronic Obstructive Pulmonary Disease.

TABLE 7.
LEADING CAUSES OF YEARS OF POTENTIAL LIFE LOST ANNUALLY, BY RACE, OREGON RESIDENTS, 1986-1994.

WHITE		AFRICAN AMERICAN	
CAUSE	YEARS	CAUSE	YEARS
TOTAL	109,467	**TOTAL**	4,190
1. Unintentional Injuries	23,970	**1.** Unintentional Injuries	589
2. Cancer	19,150	**2.** Homicide	571
3. Heart Disease	11,576	**3.** Perinatal Conditions	522
4. Suicide	8,843	**4.** Cancer	384
5. Perinatal Conditions	6,741	**5.** SIDS	369
6. Congenital Anomalies	5,899	**6.** Heart Disease	360
7. SIDS	5,307	**7.** Congenital Anomalies	188
8. AIDS	4,054	**8.** AIDS	154
9. Homicide	3,606	**9.** Suicide	141
10. Alcoholism	2,501	**10.** Cerebrovascular Disease	109
11. Cerebrovascular Disease	1,831	**11.** Alcoholism	108
12. Diabetes	1,384	**12.** External Causes of Undetermined Manner	81
13. Chronic Obstructive Pulmonary Disease	1,379	**13.** Pneumonia & Influenza	70
14. External Causes of Undetermined Manner	1,377	**14.** Chronic Obstructive Pulmonary Disease	69
15. Pneumonia & Influenza	1,047	**15.** Diabetes	48

TABLE 7.
LEADING CAUSES OF YEARS OF POTENTIAL LIFE LOST ANNUALLY, BY RACE, OREGON RESIDENTS, 1986-1994.

AMERICAN INDIAN		CHINESE & JAPANESE	
CAUSE	YEARS	CAUSE	YEARS
TOTAL	2,366	**TOTAL**	433
1. Unintentional Injuries	730	**1.** Cancer	103
2. Heart Disease	200	**2.** Unintentional Injuries	48
3. Suicide	186	**3.** Suicide	41
3 Homicide	186	**4.** Homicide	40
5. SIDS	167	**5.** Heart Disease	31
6. Alcoholism	166	**6.** SIDS	21
7. Cancer	151	**7.** Cerebrovascular Disease	18
8. Perinatal Conditions	104	**8.** Congenital Anomalies	14
9. Congenital Anomalies	83	**8.** Perinatal Conditions	14
10. AIDS	42	**10.** Pneumonia & Influenza	5
11. Cerebrovascular Disease	39	**10.** AIDS	5
12. Pneumonia & Influenza	36	**12.** Diabetes	3
13. External Causes of Undetermined Manner	21	**12.** Alcoholism	3
14. Diabetes	14	**14.** COPD	2
15. Septicemia	11	**14.** External Causes of Undetermined Manner	2

TABLE 8.
PERCENTAGE DIFFERENCE IN AGE-ADJUSTED DEATH RATES, OREGON AND UNITED STATES AFRICAN AMERICANS, AND THE OREGON RANKING AMONG THE STATES, 1986-1992.

CAUSE	PERCENTAGE DIFFERENCE	RANKING (HIGH TO LOW)
All Causes	-1.0	23
Heart Disease	-11.5	34
Cancer	-1.8	25
Lung Cancer	17.5	9
Cerebrovascular Disease	26.7	4
Unintentional Injuries	11.2	11
Motor Vehicle	4.4	19
Homicide	-13.5	21
Diabetes	26.1	7
Pneumonia & Influenza	-2.5	18
Chronic Obstructive Pulmonary Disease	0.7	28
Alcoholism	41.4	3
AIDS	-61.1	29
Drug Use	112.5	1

TABLE 9.
THE LEADING CAUSES OF DEATH AND YEARS OF POTENTIAL LIFE LOST (YPLL), OREGON HISPANICS, 1988-1994.

NUMBER OF DEATHS			YPLL PER YEAR		
ALL CAUSES		1,794	ALL CAUSES		4,474
1	Unintentional Injuries	372	1	Unintentional Injuries	1,473
2	Heart Disease	262	2	Perinatal Conditions	584
2	Cancer	262	3	Congenital Anomalies	370
4	Cerebrovascular Disease	95	4	Homicide	355
5	Homicide	88	5	SIDS	278
6	Perinatal Conditions	84	6	Suicide	215
7	Diabetes	68	7	Cancer	206
8	Suicide	59	8	AIDS	144
9	Alcoholism	56	9	Heart Disease	112
10	Congenital Anomalies	55	10	Alcoholism	94
11	AIDS	47	11	Undetermined Injuries*	75
12	SIDS	40	12	Cerebrovascular Disease	62
13	Pneumonia & Influenza	31	13	Pneumonia & Influenza	51
14	COPD	24	14	Diabetes	39
15	Undetermined Injuries*	19	15	Septicemia	30

* Injuries undetermined whether intentionally or unintentionally inflicted.

TABLE 10.
LEADING CAUSES OF DEATH BY AGE, OREGON HISPANICS, 1988-1994.

CAUSE	#	%	CAUSE	#	%
0-14 YEARS			55-64 YEARS		
Total	268	100.0	Total	188	100.0
Perinatal Conditions	84	31.3	Cancer	55	29.3
Congenital Anomalies	51	19.0	Heart Disease	43	22.9
SIDS	40	14.9	Diabetes	19	10.1
Unintentional Injuries	37	13.8	Alcoholism	14	7.4
Cancer	5	1.9	Unintentional Injuries	12	6.4
15-24 YEARS			65-74 YEARS		
Total	205	100.0	Total	296	100.0
Unintentional Injuries	124	60.5	Heart Disease	96	32.4
Homicide	35	17.1	Cancer	89	30.1
Suicide	20	9.8	Diabetes	22	7.4
Cancer	5	2.4	Cerebrovascular Disease	16	5.4
Undetermined Injuries*	5	2.4	COPD	10	3.4
25-34 YEARS			75+ YEARS		
Total	210	100.0	Total	314	100.0
Unintentional Injuries	109	51.9	Heart Disease	90	28.7
Homicide	29	13.8	Cancer	57	18.2
AIDS	19	9.0	Cerebrovascular Disease	47	15.0
Suicide	15	7.1	Diabetes	14	4.5
Undetermined Injuries*	6	2.9	Pneumonia & Influenza	13	4.1
35-54 YEARS			ALL AGES		
Total	313	100.0	Total	1,794	100.0
Unintentional Injuries	77	24.6	Unintentional Injuries	372	20.7
Cancer	46	14.7	Heart Disease	262	14.6
Alcoholism	29	9.3	Cancer	262	14.6
Heart disease	25	8.0	Cerebrovascular Disease	95	5.3
AIDS	21	6.7	Homicide	88	4.9

*Injuries undetermined whether intentionally or unintentionally inflicted.

TABLE 11.
OREGON POPULATION BY RACE AND AGE, 1990*

AGE GROUP	TOTAL	WHITE	AFRICAN AMERICAN	AMERICAN INDIAN	CHINESE & JAPANESE	OTHER
TOTAL	2,842,321	2,684,543	47,017	40,522	25,731	44,508
0-14	615,293	571,677	14,193	11,885	4,594	12,944
15-24	380,929	350,517	8,276	7,199	5,208	9,729
25-34	451,842	422,409	8,496	7,213	5,228	8,496
35-54	768,426	731,482	10,414	9,982	6,414	10,134
55-64	236,066	227,492	2,475	2,195	2,123	1,781
65-74	223,915	218,104	1,990	1,376	1,567	878
75+	165,850	162,862	1,173	672	597	546

* The Total, White, African American and American Indian populations are from the U.S. Census Bureau's Modified Age, Race and Sex (MARS) file for 1990. This file included the category "Asian" but not the subsets within this category. The Chinese and Japanese subset used in the report is based on the original 1990 census but was adjusted to reflect the changes made to the overall Asian category in the MARS file.

APPENDICES

APPENDIX 1.
DEATHS FROM ALL CAUSES BY RACE, OREGON RESIDENTS, 1986 - 1994.

NUMBER OF DEATHS BY AGE

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	4093	3040	4438	17224	22520	49270	120257
African American	215	116	168	582	419	649	917
American Indian	98	77	129	320	218	271	346
Chinese & Japanese	18	13	11	59	142	213	419
Other	126	107	105	216	140	185	303
Total	4550	3353	4851	18401	23439	50588	122242

AGE-SPECIFIC DEATH RATES

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	79.6	96.4	116.7	261.6	1099.9	2510.0	8204.4
African American	168.3	155.7	219.7	621.0	1881.0	3623.7	8686.2
American Indian	91.6	118.8	198.7	356.2	1103.5	2188.3	5720.9
Chinese & Japanese	43.5	27.7	23.4	102.2	743.2	1510.3	7798.3
Other	108.2	122.2	137.3	236.8	873.4	2341.2	6166.1
Total	82.2	97.8	119.3	266.1	1103.2	2510.3	8189.6

SUMMARY DEATH STATISTICS

RACE	Total Deaths	Crude Death Rate	Age-Adjusted Death Rate	Comparative Mortality Figure	Years of Potential Life Lost Index	Mean YPLL Per Year
White	220842	914.0	887.8	1.000	1.000	109467
African American	3066	724.6	1209.3	1.361 .01	2.027 .01	4190
American Indian	1459	400.1	761.9	0.858 .01	1.302 .01	2366
Chinese & Japanese	875	377.8	680.7	0.767 .01	0.394 .01	433
Other	1182	295.1	742.8	0.837 .01	1.166 .01	2355
Total	227424	889.0	889.0	1.001	1.020	118811

Note: Summary death statistics, other than the total number of deaths and the crude death rate, were not calculated for races with fewer than 50 deaths. Statistically significant CMF and YLLI values are indicated by .01, .02, .05 where appropriate. Death rates are per 100,000 population.

APPENDIX 2.
HEART DISEASE DEATHS BY RACE, OREGON RESIDENTS, 1986 - 1994.

NUMBER OF DEATHS BY AGE

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	67	52	199	3210	6181	14419	42176
African American	4	3	11	103	105	193	309
American Indian	3	1	2	62	66	76	120
Chinese & Japanese	0	0	1	6	28	54	145
Other	0	2	8	28	37	53	89
Total	74	58	221	3409	6417	14795	42839

AGE-SPECIFIC DEATH RATES

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	1.3	1.6	5.2	48.8	301.9	734.6	2877.4
African American	3.1	4.0	14.4	109.9	471.4	1077.6	2927 0
American Indian	2.8	1.5	3.1	69.0	334.1	613.7	1984.1
Chinese & Japanese	0.0	0.0	2.1	10.4	146.5	382.9	2698.7
Other	0.0	2.3	10.5	30.7	230.8	670.7	1811.2
Total	1.3	1.7	5.4	49.3	302.0	734.2	2870.0

SUMMARY DEATH STATISTICS

RACE	Total Deaths	Crude Death Rate	Age-Adjusted Death Rate	Comparative Mortality Figure	Years of Potential Life Lost Index	Mean YPLL Per Year
White	66304	274.4	265.5	1.000	1.000	11576
African American	728	172.0	328.2	1.236 .01	2.168 .01	360
American Indian	330	90.5	212.0	0.798 .01	1.309 .05	200
Chinese & Japanese	234	101.0	203.1	0.764 .01	0.292 .01	31
Other	217	54.2	188.1	0.708 .01	0.781	120
Total	67813	265.1	265.1	0.998	1.009	12288

Note: Summary death statistics, other than the total number of deaths and the crude death rate, were not calculated for races with fewer than 50 deaths. Statistically significant CMF and YLLI values are indicated by .01, .02, .05 where appropriate. Death rates are per 100,000 population.

APPENDIX 3.
CANCER DEATHS BY RACE,
OREGON RESIDENTS, 1986 - 1994.

NUMBER OF DEATHS BY AGE

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	177	156	439	5082	8787	16982	21384
African American	3	2	13	105	150	200	179
American Indian	0	2	4	43	65	79	68
Chinese & Japanese	0	0	1	30	67	78	69
Other	3	7	5	50	48	53	62
Total	183	167	462	5310	9117	17392	21762

AGE-SPECIFIC DEATH RATES

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	3.4	4.9	11.5	77.2	429.2	865.1	1458.9
African American	2.3	2.7	17.0	112.0	673.4	1116.7	1695.6
American Indian	0.0	3.1	6.2	47.9	329.0	637.9	1124.3
Chinese & Japanese	0.0	0.0	2.1	52.0	350.7	553.1	1284.2
Other	2.6	8.0	6.5	54.8	299.5	670.7	1261.7
Total	3.3	4.9	11.4	76.8	429.1	863.0	1457.9

SUMMARY DEATH STATISTICS

RACE	Total Deaths	Crude Death Rate	Age-Adjusted Death Rate	Comparative Mortality Figure	Years of Potential Life Lost Index	Mean YPLL Per Year
White	53007	219.4	213.2	1.000	1.000	19150
African American	652	154.1	276.8	1.298 .01	1.338 .01	384
American Indian	261	71.6	157.6	0.739 .01	0.576 .01	151
Chinese & Japanese	245	105.8	162.1	0.761 .01	0.570 .01	103
Other	228	56.9	168.9	0.793 .01	0.769 .05	207
Total	54393	212.6	212.6	0.997	0.993	19995

Note: Summary death statistics, other than the total number of deaths and the crude death rate, were not calculated for races with fewer than 50 deaths. Statistically significant CMF and YLLI values are indicated by .01, .02, .05 where appropriate. Death rates are per 100,000 population.

APPENDIX 4.
LUNG CANCER DEATHS BY RACE, OREGON RESIDENTS, 1986 - 1994.

NUMBER OF DEATHS BY AGE

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	0	2	19	1371	3288	6066	5004
African American	0	0	1	27	49	73	46
American Indian	0	0	0	14	27	24	25
Chinese & Japanese	0	0	0	5	13	13	14
Other	0	0	1	10	11	12	10
Total	0	2	21	1427	3388	6188	5099

AGE-SPECIFIC DEATH RATES

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	0.0	0.1	0.5	20.8	160.6	309.0	341.4
African American	0.0	0.0	1.3	28.8	220.0	407.6	435.7
American Indian	0.0	0.0	0.0	15.6	136.7	193.8	413.4
Chinese & Japanese	0.0	0.0	0.0	8.7	68.0	92.2	260.6
Other	0.0	0.0	1.3	11.0	68.6	151.9	203.5
Total	0.0	0.1	0.5	20.6	159.5	307.1	341.6

SUMMARY DEATH STATISTICS

RACE	Total Deaths	Crude Death Rate	Age-Adjusted Death Rate	Comparative Mortality Figure	Years of Potential Life Lost Index	Mean YPLL Per Year
White	15750	65.2	63.4	1.000	1.000	4726
African American	196	46.3	83.8	1.323 .01	1.403 .05	87
American Indian	90	24.7	55.0	0.868	0.758	44
Chinese & Japanese	45	19.4	.	.	.	17
Other	44	11.0	.	.	.	31
Total	16125	63.0	63.0	0.994	0.992	4905

Note: Summary death statistics, other than the total number of deaths and the crude death rate, were not calculated for races with fewer than 50 deaths. Statistically significant CMF and YLLI values are indicated by .01, .02, .05 where appropriate. Death rates are per 100,000 population.

APPENDIX 5.
CEREBROVASCULAR DISEASE DEATHS BY RACE, OREGON RESIDENTS, 1986 - 1994.

NUMBER OF DEATHS BY AGE

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	16	13	38	499	846	2827	13854
African American	0	3	3	33	22	67	113
American Indian	0	0	2	14	3	15	26
Chinese & Japanese	0	0	0	5	14	14	41
Other	1	1	1	18	5	19	37
Total	17	17	44	569	890	2942	14071

AGE-SPECIFIC DEATH RATES

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	0.3	0.4	1.0	7.6	41.3	144.0	945.2
African American	0.0	4.0	3.9	35.2	98.8	374.1	1070.4
American Indian	0.0	0.0	3.1	15.6	15.2	121.1	429.9
Chinese & Japanese	0.0	0.0	0.0	8.7	73.3	99.3	763.1
Other	0.9	1.1	1.3	19.7	31.2	240.4	753.0
Total	0.3	0.5	1.1	8.2	41.9	146.0	942.7

SUMMARY DEATH STATISTICS

RACE	Total Deaths	Crude Death Rate	Age-Adjusted Death Rate	Comparative Mortality Figure	Years of Potential Life Lost Index	Mean YPLL Per Year
White	18093	74.9	72.3	1.000	1.000	1831
African American	241	57.0	110.9	1.534 .01	3.978 .01	109
American Indian	60	16.5	40.6	0.562 .01	1.565	39
Chinese & Japanese	74	32.0	60.8	0.842	1.045	18
Other	82	20.5	71.4	0.988	2.214 .05	57
Total	18550	72.5	72.5	1.003	1.065	2053

Note: Summary death statistics, other than the total number of deaths and the crude death rate, were not calculated for races with fewer than 50 deaths. Statistically significant CMF and YLLI values are indicated by .01, .02, .05 where appropriate. Death rates are per 100,000 population.

APPENDIX 6.
CHRONIC OBSTRUCTIVE PULMONARY DISEASE DEATHS BY RACE, OREGON RESIDENTS, 1986 - 1994.

NUMBER OF DEATHS BY AGE

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	2	7	14	286	1274	3911	6135
African American	1	1	0	24	11	19	18
American Indian	0	0	0	3	6	19	14
Chinese & Japanese	0	0	0	0	3	8	11
Other	0	0	1	1	3	8	12
Total	3	8	15	314	1297	3965	6190

AGE-SPECIFIC DEATH RATES

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	0.0	0.2	0.4	4.3	62.2	199.2	418.6
African American	0.8	1.3	0.0	25.6	49.4	106.1	170.5
American Indian	0.0	0.0	0.0	3.3	30.4	153.4	231.5
Chinese & Japanese	0.0	0.0	0.0	0.0	15.7	56.7	204.7
Other	0.0	0.0	1.3	1.1	18.7	101.2	244.2
Total	0.1	0.2	0.4	4.5	61.0	196.8	414.7

SUMMARY DEATH STATISTICS

RACE	Total Deaths	Crude Death Rate	Age-Adjusted Death Rate	Comparative Mortality Figure	Years of Potential Life Lost Index	Mean YPLL Per Year
White	11629	48.1	46.6	1.000	1.000	1379
African American	74	17.5	29.7	0.637 .01	3.729 .01	69
American Indian	42	11.5	.	.	.	10
Chinese & Japanese	22	9.5	.	.	.	2
Other	25	6.2	.	.	.	8
Total	11792	46.1	46.1	0.989	1.024	1466

Note: Summary death statistics, other than the total number of deaths and the crude death rate, were not calculated for races with fewer than 50 deaths. Statistically significant CMF and YLLI values are indicated by .01, .02, .05 where appropriate. Death rates are per 100,000 population.

APPENDIX 7.
UNINTENTIONAL INJURIES DEATHS BY RACE, OREGON RESIDENTS, 1986 - 1994.

NUMBER OF DEATHS BY AGE

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	696	1677	1494	2139	675	839	2116
African American	28	27	29	65	14	7	14
American Indian	25	42	56	58	8	6	6
Chinese & Japanese	0	7	2	2	2	9	16
Other	26	61	37	40	7	7	5
Total	775	1814	1618	2304	706	868	2157

AGE-SPECIFIC DEATH RATES

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	13.5	53.2	39.3	32.5	33.0	42.7	144.4
African American	21.9	36.2	37.9	69.4	62.9	39.1	132.6
American Indian	23.4	64.8	86.3	64.6	40.5	48.4	99.2
Chinese & Japanese	0.0	14.9	4.3	3.5	10.5	63.8	297.8
Other	22.3	69.7	48.4	43.9	43.7	88.6	101.8
Total	14.0	52.9	39.8	33.3	33.2	43.1	144.5

SUMMARY DEATH STATISTICS

RACE	Total Deaths	Crude Death Rate	Age-Adjusted Death Rate	Comparative Mortality Figure	Years of Potential Life Lost Index	Mean YPLL Per Year
White	9636	39.9	39.6	1.000	1.000	23970
African American	184	43.5	50.4	1.272 .05	1.168	589
American Indian	201	55.1	57.9	1.460 .01	1.668 .01	730
Chinese & Japanese	38	16.4	.	.	.	48
Other	183	45.7	50.3	1.270	1.372 .01	719
Total	10242	40.0	40.0	1.009	1.013	26057

Note: Summary death statistics, other than the total number of deaths and the crude death rate, were not calculated for races with fewer than 50 deaths. Statistically significant CMF and YLLI values are indicated by .01, .02, .05 where appropriate. Death rates are per 100,000 population.

APPENDIX 8.
UNINTENTIONAL MOTOR VEHICLE-RELATED DEATHS BY RACE, OREGON RESIDENTS, 1986 - 1994.

NUMBER OF DEATHS BY AGE

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	319	1268	904	1058	294	392	510
African American	7	15	6	28	8	1	2
American Indian	7	30	27	34	5	3	2
Chinese & Japanese	0	7	0	2	2	6	5
Other	16	38	22	25	5	5	1
Total	349	1358	959	1147	314	407	520

AGE-SPECIFIC DEATH RATES

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	6.2	40.2	23.8	16.1	14.4	20.0	34.8
African American	5.5	20.1	7.8	29.9	35.9	5.6	18.9
American Indian	6.5	46.3	41.6	37.8	25.3	24.2	33.1
Chinese & Japanese	0.0	14.9	0.0	3.5	10.5	42.5	93.1
Other	13.7	43.4	28.8	27.4	31.2	63.3	20.4
Total	6.3	39.6	23.6	16.6	14.8	20.2	34.8

SUMMARY DEATH STATISTICS

RACE	Total Deaths	Crude Death Rate	Age-Adjusted Death Rate	Comparative Mortality Figure	Years of Potential Life Lost Index	Mean YPLL Per Year
White	4745	19.6	19.7	1.000	1.000	14499
African American	67	15.8	17.7	0.902	0.683 .01	211
American Indian	108	29.6	30.4	1.547 .05	1.413 .01	379
Chinese & Japanese	22	9.5	.	.	.	40
Other	112	28.0	29.5	1.503 .02	1.349 .02	443
Total	5054	19.8	19.8	1.007	1.000	15573

Note: Summary death statistics, other than the total number of deaths and the crude death rate, were not calculated for races with fewer than 50 deaths. Statistically significant CMF and YLLI values are indicated by .01, .02, .05 where appropriate. Death rates are per 100,000 population.

APPENDIX 9.
PNEUMONIA AND INFLUENZA DEATHS BY RACE, OREGON RESIDENTS, 1986 - 1994.

NUMBER OF DEATHS BY AGE

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	48	15	30	187	234	934	6184
African American	2	0	4	18	5	16	32
American Indian	2	2	0	5	2	9	21
Chinese & Japanese	0	0	0	2	1	2	23
Other	3	1	0	1	0	4	19
Total	55	18	34	213	242	965	6279

AGE-SPECIFIC DEATH RATES

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	0.9	0.5	0.8	2.8	11.4	47.6	421.9
African American	1.6	0.0	5.2	19.2	22.4	89.3	303.1
American Indian	1.9	3.1	0.0	5.6	10.1	72.7	347.2
Chinese & Japanese	0.0	0.0	0.0	3.5	5.2	14.2	428.1
Other	2.6	1.1	0.0	1.1	0.0	50.6	386.7
Total	1.0	0.5	0.8	3.1	11.4	47.9	420.7

SUMMARY DEATH STATISTICS

RACE	Total Deaths	Crude Death Rate	Age-Adjusted Death Rate	Comparative Mortality Figure	Years of Potential Life Lost Index	Mean YPLL Per Year
White	7632	31.6	30.5	1.000	1.000	1047
African American	77	18.2	33.0	1.081	3.626 .01	70
American Indian	41	11.2	.	.	.	36
Chinese & Japanese	28	12.1	.	.	.	5
Other	28	7.0	.	.	.	28
Total	7806	30.5	30.5	1.000	1.063	1186

Note: Summary death statistics, other than the total number of deaths and the crude death rate, were not calculated for races with fewer than 50 deaths. Statistically significant CMF and YLLI values are indicated by .01, .02, .05 where appropriate. Death rates are per 100,000 population.

APPENDIX 10.
DIABETES DEATHS BY RACE,
OREGON RESIDENTS, 1986 - 1994.

NUMBER OF DEATHS BY AGE

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	1	9	55	390	548	1141	2159
African American	0	0	2	15	15	32	42
American Indian	0	0	0	3	14	17	15
Chinese & Japanese	0	0	0	0	5	10	17
Other	0	1	0	5	2	8	8
Total	1	10	57	413	584	1208	2241

AGE-SPECIFIC DEATH RATES

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	0.0	0.3	1.4	5.9	26.8	58.1	147.3
African American	0.0	0.0	2.6	16.0	67.3	178.7	397.8
American Indian	0.0	0.0	0.0	3.3	70.9	137.3	248.0
Chinese & Japanese	0.0	0.0	0.0	0.0	26.2	70.9	316.4
Other	0.0	1.1	0.0	5.5	12.5	101.2	162.8
Total	0.0	0.3	1.4	6.0	27.5	59.9	150.1

SUMMARY DEATH STATISTICS

RACE	Total Deaths	Crude Death Rate	Age-Adjusted Death Rate	Comparative Mortality Figure	Years of Potential Life Lost Index	Mean YPLL Per Year
White	4303	17.8	17.3	1.000	1.000	1384
African American	106	25.1	47.7	2.758 .01	2.337 .01	48
American Indian	49	13.4	.	.	.	14
Chinese & Japanese	32	13.8	.	.	.	3
Other	24	6.0	.	.	.	17
Total	4514	17.6	17.6	1.018	1.005	1465

Note: Summary death statistics, other than the total number of deaths and the crude death rate, were not calculated for races with fewer than 50 deaths. Statistically significant CMF and YLLI values are indicated by .01, .02, .05 where appropriate. Death rates are per 100,000 population.

APPENDIX 11.
SUICIDE DEATHS BY RACE,
OREGON RESIDENTS, 1986 - 1994.

NUMBER OF DEATHS BY AGE

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	42	557	720	1285	419	469	527
African American	0	15	10	12	2	5	1
American Indian	1	18	16	12	2	0	1
Chinese & Japanese	1	4	2	3	0	2	1
Other	1	9	17	16	3	0	2
Total	45	603	765	1328	426	476	532

AGE-SPECIFIC DEATH RATES

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	0.8	17.7	18.9	19.5	20.5	23.9	36.0
African American	0.0	20.1	13.1	12.8	9.0	27.9	9.5
American Indian	0.9	27.8	24.6	13.4	10.1	0.0	16.5
Chinese & Japanese	2.4	8.5	4.3	5.2	0.0	14.2	18.6
Other	0.9	10.3	22.2	17.5	18.7	0.0	40.7
Total	0.8	17.6	18.8	19.2	20.1	23.6	35.6

SUMMARY DEATH STATISTICS

RACE	Total Deaths	Crude Death Rate	Age-Adjusted Death Rate	Comparative Mortality Figure	Years of Potential Life Lost Index	Mean YPLL Per Year
White	4019	16.6	16.5	1.000	1.000	8843
African American	45	10.6	.	.	.	141
American Indian	50	13.7	13.3	0.804	1.233	186
Chinese & Japanese	13	5.6	.	.	.	41
Other	48	12.0	.	.	.	154
Total	4175	16.3	16.3	0.987	0.990	9365

Note: Summary death statistics, other than the total number of deaths and the crude death rate, were not calculated for races with fewer than 50 deaths. Statistically significant CMF and YLLI values are indicated by .01, .02, .05 where appropriate. Death rates are per 100,000 population.

APPENDIX 12.
ALCOHOLISM DEATHS BY RACE, OREGON RESIDENTS, 1986 - 1994.

NUMBER OF DEATHS BY AGE

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	0	4	71	840	791	743	335
African American	0	0	5	37	18	7	6
American Indian	0	0	10	55	18	12	4
Chinese & Japanese	0	0	0	1	1	0	0
Other	0	0	0	8	3	3	3
Total	0	4	86	941	831	765	348

AGE-SPECIFIC DEATH RATES

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	0.0	0.1	1.9	12.8	38.6	37.9	22.9
African American	0.0	0.0	6.5	39.5	80.8	39.1	56.8
American Indian	0.0	0.0	15.4	61.2	91.1	96.9	66.1
Chinese & Japanese	0.0	0.0	0.0	1.7	5.2	0.0	0.0
Other	0.0	0.0	0.0	8.8	18.7	38.0	61.1
Total	0.0	0.1	2.1	13.6	39.1	38.0	23.3

SUMMARY DEATH STATISTICS

RACE	Total Deaths	Crude Death Rate	Age-Adjusted Death Rate	Comparative Mortality Figure	Years of Potential Life Lost Index	Mean YPLL Per Year
White	2784	11.5	11.3	1.000	1.000 .05	2501
African American	73	17.3	24.8	2.199 .01	2.983 .01	108
American Indian	99	27.1	38.1	3.373 .01	4.921 .01	166
Chinese & Japanese	2	0.9	.	.	.	3
Other	17	4.2	.	.	.	19
Total	2975	11.6	11.6	1.028	1.062	2796

Note: Summary death statistics, other than the total number of deaths and the crude death rate, were not calculated for races with fewer than 50 deaths. Statistically significant CMF and YLLI values are indicated by .01, .02, .05 where appropriate. Death rates are per 100,000 population.

APPENDIX 13.
AIDS DEATHS BY RACE,
OREGON RESIDENTS, 1986 - 1994.

NUMBER OF DEATHS BY AGE

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	9	26	484	904	96	22	4
African American	0	1	18	36	4	0	0
American Indian	0	0	7	7	0	0	0
Chinese & Japanese	0	0	0	2	1	0	0
Other	0	0	3	1	0	0	0
Total	9	27	512	950	101	22	4

AGE-SPECIFIC DEATH RATES

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	0.2	0.8	12.7	13.7	4.7	1.1	0.3
African American	0.0	1.3	23.5	38.4	18.0	0.0	0.0
American Indian	0.0	0.0	10.8	7.8	0.0	0.0	0.0
Chinese & Japanese	0.0	0.0	0.0	3.5	5.2	0.0	0.0
Other	0.0	0.0	3.9	1.1	0.0	0.0	0.0
Total	0.2	0.8	12.6	13.7	4.8	1.1	0.3

SUMMARY DEATH STATISTICS

RACE	Total Deaths	Crude Death Rate	Age-Adjusted Death Rate	Comparative Mortality Figure	Years of Potential Life Lost Index	Mean YPLL Per Year
White	1545	6.4	6.4	1.000	1.000	4054
African American	59	13.9	15.8	2.476 .01	2.184 .01	154
American Indian	14	3.8	.	.	.	42
Chinese & Japanese	3	1.3	.	.	.	5
Other	4	1.0	.	.	.	14
Total	1625	6.4	6.4	1.003	0.996	4268

Note: Summary death statistics, other than the total number of deaths and the crude death rate, were not calculated for races with fewer than 50 deaths. Statistically significant CMF and YLLI values are indicated by .01, .02, .05 where appropriate. Death rates are per 100,000 population.

APPENDIX 14.
DRUG DEATHS BY RACE,
OREGON RESIDENTS, 1986 - 1994.

NUMBER OF DEATHS BY AGE

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	8	113	341	649	100	70	62
African American	2	2	16	44	6	1	0
American Indian	1	3	14	12	1	0	0
Chinese & Japanese	0	0	1	0	0	0	1
Other	0	3	2	5	2	0	0
Total	11	121	374	710	109	71	63

AGE-SPECIFIC DEATH RATES

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	0.2	3.6	9.0	9.9	4.9	3.6	4.2
African American	1.6	2.7	20.9	46.9	26.9	5.6	0.0
American Indian	0.9	4.6	21.6	13.4	5.1	0.0	0.0
Chinese & Japanese	0.0	0.0	2.1	0.0	0.0	0.0	18.6
Other	0.0	3.4	2.6	5.5	12.5	0.0	0.0
Total	0.2	3.5	9.2	10.3	5.1	3.5	4.2

SUMMARY DEATH STATISTICS

RACE	Total Deaths	Crude Death Rate	Age-Adjusted Death Rate	Comparative Mortality Figure	Years of Potential Life Lost Index	Mean YPLL Per Year
White	1343	5.6	5.5	1.000	1.000	3385
African American	71	16.8	19.4	3.501 .01	2.976 .01	183
American Indian	31	8.5	.	.	.	103
Chinese & Japanese	2	0.9	.	.	.	4
Other	12	3.0	.	.	.	35
Total	1459	5.7	5.7	1.029	1.030	3709

Note: Summary death statistics, other than the total number of deaths and the crude death rate, were not calculated for races with fewer than 50 deaths. Statistically significant CMF and YLLI values are indicated by .01, .02, .05 where appropriate. Death rates are per 100,000 population.

APPENDIX 15.
HOMICIDE DEATHS BY RACE,
OREGON RESIDENTS, 1986 - 1994.

NUMBER OF DEATHS BY AGE

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	107	196	291	334	67	70	51
African American	8	54	44	33	7	3	2
American Indian	4	9	19	18	2	2	0
Chinese & Japanese	3	1	3	1	0	0	0
Other	5	17	21	15	2	0	0
Total	127	277	378	401	78	75	53

AGE-SPECIFIC DEATH RATES

RACE	0-14	15-24	25-34	35-54	55-64	65-74	75+
White	2.1	6.2	7.7	5.1	3.3	3.6	3.5
African American	6.3	72.5	57.5	35.2	31.4	16.8	18.9
American Indian	3.7	13.9	29.3	20.0	10.1	16.1	0.0
Chinese & Japanese	7.3	2.1	6.4	1.7	0.0	0.0	0.0
Other	4.3	19.4	27.5	16.4	12.5	0.0	0.0
Total	2.3	8.1	9.3	5.8	3.7	3.7	3.6

SUMMARY DEATH STATISTICS

RACE	Total Deaths	Crude Death Rate	Age-Adjusted Death Rate	Comparative Mortality Figure	Years of Potential Life Lost Index	Mean YPLL Per Year
White	1116	4.6	4.6	1.000 .01	1.000	3606
African American	151	35.7	34.8	7.515 .01	7.601 .01	571
American Indian	54	14.8	14.9	3.210 .01	2.856 .01	186
Chinese & Japanese	8	3.5	.	.	.	40
Other	60	15.0	13.4	2.891 .02	3.019 .01	235
Total	1389	5.4	5.4	1.167	1.202	4638

Note: Summary death statistics, other than the total number of deaths and the crude death rate, were not calculated for races with fewer than 50 deaths. Statistically significant CMF and YLLI values are indicated by .01, .02, .05 where appropriate. Death rates are per 100,000 population.

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